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AN INTRODUCTION TO INDIAN ECONOMICS

With a Foreword

By

Dr. S. N. SEN, M. A., PH. D. (Lond.).

Reader in Economics, Calcutta University.

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I have read the manuscript and have been struck by the perseverance and the competence with which the authors have marshalled their facts. Indian economy is now on the march, and a number of Surveys and Committees are busy throwing light on the hitherto unknown or little known sectors of the economic organisation. Profs. Das and Chatterji have striven hard to gather all this information and to present them in a simple lucid style for the busy readers of the subject.

As I have told the authors, there are portions which I find it difficult to accept. There are also places where I would have liked them to pursue the analysis further to its logical conclusion. In the end we have agreed to differ. On the whole I have nothing but praise for the efficient manner in which these two authors have carried out the task they have set out before themselves.

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much less importance than the common interests of the family. In the modern ages, western societies are characterised by the existence of a highly competitive spirit, whereas custom, rather than competition, regulates the lives of Indians. The caste system and the peculiar socio-religious outlook of the Indian people are not to be found in any of the western countries. Hence Mr Ranade argued that the ordinary economic principles could not be applied to India in toto. We would have to deduce quite a different set of principles suited to the peculiar conditions of India.

That there is some truth in these contentions cannot be denied. But this misconceives the whole basis of the economic principles. Economic principles are deduced on the basis of certain definite hypotheses, and no good economist will fail to examine whether these hypotheses are to be found in particular cases as he proceeds to apply the principles to these cases. It is not correct to state that the majority of these hypotheses cannot be found to be present in the case of the Indian economic organisation. There is no doubt that with the passage of time the Indian economic organisation is approximating more and more to the western conditions. The improvement of communications, the rise of large-scale factories, the gradually increasing sway of competition are all tending to obliterate the differences, if any, between the Indian and western economic organisations. The influence of custom is steadily decreasing, and the bonds of the caste system and the joint family organisation are breaking down under the impact of the new economic forces. Hence in spite of some peculiarities, the economic organisation is not materially different from that of the west. It is, therefore, not correct to say that Indian economics means those principles that have been deduced from the study of the peculiar economic conditions of India. It is, of course, true that the problems of each country are different from those of others. But that does not mean that each country will have to evolve a new science of economics for itself.

Another possible interpretation of Indian economics may be that it is a study of the growth of economic thought in India. The finding of Kautilya's Arthashastra and other books has pointed our attention to the high degree of thinking in economic matters developed in ancient days. But this is not the sense in which this term is usually accepted by modern writers. There

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We offer our heartfelt thanks to our teacher, Dr. S. N. Sen, of the Department of Economics, University of Calcutta, who so kindly agreed to read the manuscript and to write a foreward, in spite of his so many engagements. The book has no doubt been improved in many places as a result of his valuable suggestions. It must, however, be understood that he is not responsible for the opinions expressed in this book or for its defects and mistakes.

We also thank our Printers, the Basusree Press, and the Publishers whose co-operation has made it possible for us to print this book within a short time. Our desire to publish the book hurriedly has unfortunately been responsible for a number of printing mistakes for which we crave the indulgence of our readers.

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CHAPTER 2

PHYSICAL FEATURES

The first step in any realistic study of the economic conditions of a country is to know its physical features. These provide the background for the development of the resources of the country. The physical features of a country exercise a considerable influence over its economic organisation. Hence we propose to start our discussion with a study of the physical features of India.

A recent study has divided India into five natural divisions—the Himalayan Region, the Northern Plains Region, the Peninsular Hills and Plateau Region, the Western Ghats and Coastal Region and the Eastern Ghats and Coastal Region.

The Himalayan Region. The great Himalayan mountains stretch for 1500 miles between the Brahmaputra on the east and the gorges of the Indus on the west. It includes four divisions, the Jammu and Kashmir, the Himachal Pradesh, Bilaspur, the Northern areas of Uttar Pradesh, West Bengal and the Assam Hill Division. This is a predominantly mountainous region, varying in elevation from 2000 ft to 21,500 ft. This region is economically important as it contains large deposits of rock-salt, gypsum, coal, magnesite, dolomite, petroleum etc. It also grows a large variety of crops like tea, paddy, sugarcane etc. and different kinds of fruits. There are large areas of forests yielding a good supply of timber. This region includes some of the most well-known and delightful hill stations like Simla, Mussooree, the valley of Srinagar, Darjeeling etc.

The Northern Plains Region consists of 4 divisions, the upper Gangetic Plains including the whole of the plains of Uttar Pradesh except the eastern parts of the state, the lower Gangetic Plains (the whole of Bihar, West Bengal excepting the Himalayan districts and the eastern parts of the U. P.); the Trans-Gangetic Plains (the plains of the Punjab, Rajasthan, and the low-lying areas of Madhya Pradesh) and the Desert Division (West Rajasthan). This Region is traversed by two great river systems—the five western rivers comprising the Indus, the Ganges and the Brahmaputra. These rivers have formed rich, alluvial soils, which yield almost every kind of crops and vegetation.

The Peninsular Hills and Plateau Region comprises the south-eastern hilly areas of Rajasthan, the whole of the Madhya

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The most common characteristic of these soils is their dryness. Hence it becomes necessary to carry out large projects of irrigation to supply water to these soils.

Climate: Owing to the great size and position of the country, there are many striking contrasts in climatic conditions in India. In the north-west lies the great Thor desert with an annual average rainfall of 5 inches. In the north-east the average annual rainfall is about 425 inches at Cherrapunji in the Khasi Hills. There are places like Ganganagar in Rajasthan where the temperature rises over 120°F , while the minimum temperature falls as low as 49°F in Kashmir. There are also large variations in temperature, for example, in West Rajasthan the temperature goes up to 122°F in May and falls to 38°F in January. The result of such a diversity of climates is that India produces a great variety of animal, vegetable and mineral products, "from the wheat, fruit and fir-trees of the north to the rice and cocoanuts of the hot, lowlying swamps and coastal regions."

The Monsoons: Economically the most significant feature of the climate of India is the monsoons. The word, monsoons, is applied to the seasonal winds which change directions twice a year. These winds bring rainfall and that is why the arrival of the monsoons signifies the beginning of the rainy season. The causes of the monsoons are many and complex. But the fundamental cause is the periodic excess of heating of the land areas in summer and of cooling in winter as compared to the waters of the Indian ocean. The monsoons come in two currents: the South-West monsoons and the North-east monsoons. The South-west monsoons generally blow during the months of June to September. This relatively cool and humid current bursts on the Malabar coast during the first five days of June and is usually established over most of the country by the end of June. It may be regarded as consisting of two currents,—the Bay of Bengal current and the Arabian Sea current. The former travels over the east coast of India, covers the whole of Bengal and Assam and is then deflected west-wards up the Gangetic Plain. The Arabian Sea current covers the Western ghats and then advances over the Deccan and the Madhya Pradesh. The total rainfall during this monsoon season is over 100 inches in the north Assam valley and parts of the west coast, and diminishes steadily until it is less than 5 inches in parts of

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CHAPTER 1

DEFINITION AND SCOPE

Definiton of Indian Economics: Indian economics is a study of the economic conditions and problems which exist in our economic organisation. It is, therefore, a branch of what may be called 'applied economics'. In this study we seek to apply the principles of economic theory to an examination of the conditions prevailing in this country. A science can be studied from two aspects, pure and applied. In pure Physics, for example, the students try to find out, examine and test the principles underlying the physical universe. In applied Physics, these principles which have been found from the study of pure Physics, are then applied to particular problems. Similarly, in the principles of economics, we study what we call pure theory and try to find out the relationship between the different aspects of the economic phenomena. The subject of Indian economics is, however, a more realistic study, which seeks to examine the different aspects of the economic life of India. As in all realistic studies, the purpose of this study is mainly fruit-bearing. Throughout the whole study, we seek to find out the causes of the deficiencies in the various departments of our economic organisation, and then examine the different solutions for these deficiencies. Our purpose is to find out the causes of our abject poverty and to try to adopt measures that will open up to all of us the material means of a noble and varied life.

Other Interpretations of Indian Economics: The expression, Indian economics, is an unhappy one, as it gave rise to some controversy in its early stages. The late Mr. Justice Ranade, who first used the expression, Indian economics, argued for a quite different definition of the subject. According to him, the principles of economics which have been discussed by the western writers have been developed mainly against the background of the social and economic organisation of the western countries. These countries possessed certain special characteristics which were not to be found in India. These are highly individualistic countries where the individual, and not the family, is regarded as the centre of the economic life. But here in India the family is supreme, and the interests of the individual members of the family are generally considered to be of

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vators, are no longer in a position to buy the products of industries at the same rate as before. On account of the smaller production of the raw materials and food crops, exports of raw materials will decline and most probably we may have to import raw materials and food-stuffs in larger quantities than before. As a result, the balance of trade will tend to move against the country. The operations of the various governments will also be seriously affected. The expenditure of the state and central governments will increase as they will have to spend money on the relief of the famine-stricken population. On the other hand, their revenues will decline on various accounts. As the industries are depressed, the yield of income tax will fall. The railway revenues will decline as they carry smaller quantities of goods and passengers than they used to do in more prosperous years. Land revenue collections also fall off as the state governments will have to grant remissions of land revenue on account of the bad crops. Hence a failure of the monsoons is likely to turn even a surplus budget into a deficit one. That is why the budgets of the Governments of India have been called "as a gamble in rainfall". It is doubtful if any other single group of weather phenomena is so far-reaching in its effects.

The monsoons have also exercised some influence over other aspects of our economic organisation. They have, for example, affected the density of population in different parts of the country. Regions of abundant rainfall like West Bengal or Bihar have usually a very high density of population, while places like West Rajasthan where rainfall is scanty contain the lowest density of population.

QUESTIONS

1 Give a brief survey of the different natural regions of India. To what extent are the production and trade of the different regions of India determined by geographical factors? (Punjab 1937, All 1936)

2 Briefly describe the important varieties of soils in India, and point out their suitability for the growth of particular kinds of crops (Cal B Com 1924, 1941)

3 "Probably there is no other single group of weather phenomena which is so far-reaching to its effects as the Indian monsoon." Discuss. (C.U. 1927)

Describe the various economic consequences which follow from the failure of the monsoon. (C.U. 1937, 1936, 1934, 1931, 1930)

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is no doubt that time has come for the writing of a book on the history of the growth of Indian economic thought. But when we speak of Indian economies, we do not think of such a study. Indian economics is a study of economic conditions, not of economic thinking.

Scope of Indian Economics: The scope of Indian economics is not confined to a study of the growth of economic thought in India ; neither does it embrace the task of establishing a new science. Indian economics is a study of the economic conditions and problems of India. It is primarily a realistic study. In it, we examine the different aspects of the economic structure of our country, try to find out the causes of our poverty and then proceed to a discussion of the various solutions which have been proposed for remedying the deficiencies in our economic organisation.

Indian economics is, therefore, a study of the past, the present and the future. It examines the way in which economic institutions have been developed from the early stages. It analyses the present-day conditions, and seeks to find out the defects which are hampering our progress. It then looks into the future in its efforts to find out ways for raising the standard of living of the people.

Thus Indian economics starts with the assessment of the aggregate natural resources of all kinds. It then examines the implication of the population problem and of the social framework in which the people live and work. A detailed study of the different aspects of the economic organisation such as agriculture, industry, transport, trade, both inland and foreign, the banking and currency systems, the public finance etc., will then be attempted. Last of all, a review of the first Five-Year-Plan framed by the Planning Commission for raising the standard of living of the people will be made.

There are certain basic facts in connection with our economic organisation. One is the comparatively undeveloped nature of the organisation, which explains the low national income and poverty of the masses. There is the fact of our excessive dependence on agriculture, the existence of considerable unemployment and under-employment throughout the country, the lop-sided growth of industries, and the growing pressure of population. These are our special problems and attention will have to be devoted to their examination.

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There are about 1000 collieries in India and the total production has increased from an average of 30 m tons in 1945-50 to 36 m tons in 1952.

Iron Ore: We possess vast deposits of iron ores which are to be found in Bihar, Orissa, the Madhya Pradesh, Madras and Mysore. Most of these ores are also very rich in iron content, varying from 55 to 68 p.c. We are also fortunate in another fact that coal deposits are also situated near the iron ores in the eastern parts of the country. The reserves are estimated to be over 10,000 million tons. The iron and steel industry is one of the best organised industries of our country, and the value of the products of this industry amounted to Rs 56 40 crores in 1950. The annual production of iron ore has amounted to 3 66 m tons in 1952, and that of pig iron 1 68 m tons and of steel 1 57 m tons.

Manganese: India produces manganese ore of high quality. The principal deposits are to be found in the Madhya Pradesh, Bihar, Orissa, Madras, Mysore, Bombay and Rajasthan. Reserves of high grade ores are estimated to be between 15 to 20 million tons. Manganese is one of the key metals and is used mainly in the manufacture of steel. The average production has been about 1 3 m tons out of which a little less than 1 m tons are exported.

Mica: India is the largest producer of mica producing nearly 75 p.c of the world's output of block and sheet mica. The main regions of mica production are Bihar, Madras and Rajasthan. The mica belt in Hazaribag and Gaya districts of Bihar is the oldest and the most important. Mica is used mainly

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Bharat Plateau, Vindhya Pradesh, Bhopal, the U. P. hills and Plateau, Choto Nagpur, some districts of Orissa, parts of North Hyderabad and of Bombay, Deccan etc. The chief minerals of value are mica, iron ore, coal, manganese, copper etc. This is also well-known for a great variety of building stones like sandstones, limestones, marbles etc.

The Western Ghats and Coastal Region comprises the whole of Guzarat, Saurashtra, Kutch, Travancore-Cochin, Coorg, large parts of Bombay etc. The salt obtained from the coastal areas of this Region forms nearly one-third of the total Indian production. The beach sands along the Travancore coast contain large reserves of ilmenite. It grows large quantities of rice, cotton, oilseeds, maize etc.

The Eastern Ghats and Coastal Region consists of North Madras and Orissa coast, and Southern Madras. It also grows a large variety of crops like rice, oil seeds, jowar, bajra, maize, gram etc. There are large deposits of magnesite, iron-ore, limestone and bauxite etc.

Soils. Four main classes of soil are found extensively all over the country :—alluvial soils, black soils, laterite soils and red soils.

Alluvial soils are found in the U. P., Bombay, Deccan, Bihar, West Bengal, Orissa, parts of Madras etc. This soil contains varying amounts of salt and is extremely suitable for growing a large variety of crops.

Black Soils are generally suitable for the cultivation of cotton. These occupy greater part of Bombay and Saurashtra, western parts of Madhya Pradesh, Madhya Bharat, Hyderabad and some parts of Madras. These soils are generally deficient in nitrogen and other organic matter.

Red Soils comprise practically the major part of Madras, Mysore, south-east Bombay, east of Hyderabad, greater part of the Santhal Parganas in Bihar, the Birbhum district in West Bengal etc. These soils differ in depth and variety and lack good chemical properties. They may, however, grow a large variety of crops with a good system of irrigation.

Laterite Soils are deficient in Potash, Phosphoric acid and lime. They are to be found in certain parts of Orissa, Bombay, Malabar, Assam, Madhya Pradesh etc. They are not fertile.

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million tons and the annual production is about 67,000 tons in 1951. Our total production of aluminium amounted to 3,566 tons, a small quantity as compared to our needs and resources. The main difficulty standing in the way of the utilisation of this mineral is the lack of cheap electricity.

Gold. 95 per cent of our gold production comes from the kolar gold mines in Mysore. Small quantities are also produced in Hyderabad. We produced about 252,000 ounces of gold in 1952.

Limestone. It is used mainly in the production of cement, in building construction and in the smelting of iron and lead ores. Deposits of limestone are orderly scattered throughout India, especially in Behar, Madhya Pradesh, Rajasthan, Madhya Bharat etc.

Petroleum. We produce only very small quantities of petroleum from the oilfields of Digboi in Assam.

Salt. It is produced by the evaporation of sea water in Madras, Bombay, Orissa and Travancore and from inland sources in Rajasthan. Rock salt mines are found in Mandi in the Punjab.

We also produce China clay, fireclays, graphite, gypsum, lead, silver, sulphur etc.

In 1952, the total pit-smith value of minerals produced in India was estimated at Rs 111 crores, of which, the value of coal was Rs 101 crores, that of gold and salt was about Rs 6 crores each, of iron ore was about Rs 37 crores and of copper ore was about Rs 16 crores. We exported manganese ore of the value of Rs 20 crores, and mica of Rs 89 crores to other countries.

Review of the Mineral Position. Contrary to the popular belief, India is not rich in minerals. Our position is quite satisfactory in iron ores, mica, manganese, ilmenite and monazite. The position with regard to aluminium ore, limestone, refractories etc., may also be regarded as quite satisfactory. But we are deficient in such important minerals like copper, tin, lead and zinc, sulphur and petroleum. With regard to coal, the position is not bad, though the inadequacy of the known reserves of good quality coal is a factor of some anxiety. The concentration of coal in one part of the country is a source of difficulty.

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Rajasthan. The north-east monsoons are of land origin and generally prevail during the months of December to February. From about the middle of December, the clear weather in northern India is broken at intervals by a series of disturbances which travel eastward. The amount of rainfall is comparatively small no doubt. But it is very important for the winter crops of north-west India.

One important characteristic of the monsoons is their great variability, both in time and space. The amount of rainfall varies in different parts of the country and also at different periods of time and year. The average annual rainfall in India is about 42 inches. There have, however, been years when the average increased to 54 inches and fell to 34 inches. It has often happened that in the same year some parts of the country are suffering from draught while other areas are sometimes deluged with rain and suffer distress through excessive flooding. India has been classified into three areas according to the amount of rainfall ;—(a) areas of good rainfall on the average, such as Assam and parts of West Bengal, (b) areas of precarious rainfall, such as Bombay, Deccan excluding the western ghats etc., and (c) areas of draught, such as West Rajasthan.

Economic effects of the monsoons: The monsoons have influenced the economic life of India in many ways. India is primarily an agricultural country where about 70 p.c. of the total population depend upon agriculture for their livelihood. The soils of India are comparatively dry and do not grow large crops unless adequate quantities of water are applied to land. The supply of water to the thirsty land in due time and proportion is thus of paramount importance. If the commencement of rains is delayed over a large part of the country, or if there is a prolonged break or breaks in July or August, or if the rain terminates earlier than usual ;—all this is disastrous to the crops and produces draughts and famine. A shortage in the production of the more important agricultural crops affects the whole economy of the country. The vast majority of cultivators are so poor that if they have no or few crops to sell, they will suffer miserably. Their incomes fall and they will be unable to buy their usual requirements. As a result, our industries will also be hard hit. In the first place, the supply of industrial raw materials like raw jute, raw cotton, oilseeds etc., will decline and their prices will rise, while their main buyers, the culti-

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home life such as electric lights, telephone etc., would have been unthinkable without electricity. Secondly, electricity, especially hydro-electricity is one of the cheapest source of power, and so is an essential factor in industrial development. There are certain industries which are specially dependent upon the provision of cheap electricity. The manufacture of aluminium from bauxite is economically possible only because of cheap electricity. Cheap power is also essential for the development of the heavy chemical industry. For this reason, some of the earliest projects under the Russian Five-Year Plan was concerned mainly with the generation of hydro-electric power.

There are reasons why the rapid development of electricity is essential in the case of India. First, the concentration of coal in the eastern parts of the country has created many difficulties for industrial development. It has resulted in throwing a great burden on the railways of the country which had to transport coal to all parts with the consequent high cost of power. The development of cheap electricity in other parts of the country is therefore essential for securing a wider dispersal of industries than is possible at present. Secondly, the development of electricity is also necessary from the standpoint of agriculture. It will make it possible to produce cheap artificial fertilisers for the use of the cultivators. The various multi-purpose projects, combining irrigation with the generation of electricity, will provide cheap irrigation. Lastly, the generation of cheap electricity will also foster the development of small scale and cottage industries of our country. In Japan and Switzerland, many small-scale industries use electricity profitably with the production of cheap hydro-electric power. Our cottage and small-scale industries will also be able to utilise it and thereby lower their costs of production.

Present Hydro-electric Resources. India possesses large possibilities of hydro-electric development. But as yet only a small percentage of these resources has been utilised. The first hydro-electric plant was installed in 1897-98 at Darjeeling in West Bengal, followed by the completion of the Cauvery River Project in Mysore State in 1902. Since then some development has taken place in all states. The greatest hydro-electric works are the three schemes developed by the Tatas in Bombay, situated at Lonavala, Andhra Valley and Nila Mula. These projects have a combined normal capacity of 246,000 H. P., and

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NATURAL RESOURCES

The next step after a study of the physical features of a country is an examination of its *natural resources*. The latter determine to a large extent the total wealth of the community.

Our natural resources may be studied under the following heads :—mineral resources, power resources, agricultural resources, forests and fisheries.

Mineral Resources: Mineral resources may be studied under three groups according to their commercial importance:—minerals which are important exports, minerals in which we are more or less self-supporting and minerals which must be imported. To the first group belong such minerals as mica, ilmenite, manganese, magnesite, iron ore etc. We are more or less self-sufficient in coal, bauxite, salt, graphite, barium etc. To the last group belong oil, copper, lead, zinc, tin, sulphur, asbestos, china clays, nickel, mercury etc. We propose to examine these in details.

Coal: The major portion of coal mines is concentrated in one enormous series of deposits known as the "Gondwana system". The principal workable coal deposits of the Gondwana system are to be found in West Bengal, Bihar, the M. P., Orissa, the Madhya Bharat and Hyderabad. The "tertiary" beds of coal are to be found in Assam, the Punjab and Kashmir. The coal fields of West Bengal and Bihar produce more than 80 per cent of the total coal raised in India. Of the total coal produced in India, Bihar accounts for about 55 p.c., West Bengal for about 28 p.c., Madhya Pradesh for 6 p.c., Orissa 5 p.c., Hyderabad 4 p.c. etc. This concentration of coal production in the eastern parts of the country is one of the most serious defects in our industrial organisation. As a consequence of this concentration, coal has to be transported by railways at considerable costs to other parts of India, and this raises the cost of production in other industries using coal.

A second problem in connection with the coal deposits is the comparative inadequacy of the reserves of good quality, metallurgical coal. It has been estimated that while the reserves of low grade coal are quite satisfactory, those of good quality

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besides providing irrigation for large areas. A brief description of some of these projects is given below.

In the Punjab, the most important hydro-electric project is the Bhakra-Nangal project, which is estimated to cost about Rs 126 crores. The total generating capacity of this project will be about 400,000 Kw and this will provide electricity to about 67 towns in the Punjab, beside irrigating 65 lakh areas of land.

In West Bengal, the most important scheme is the Damodar Valley Project, which, by harnessing the water of the river Damodar, is expected to generate about 300,000 Kw. In Orissa, the Hirakund Dam Project is estimated to generate 350,000 Kw by building a dam across the river Mahanadi. In Bihar, the Koshi Project will generate 18 m Kw. In Madras, there are several Projects like the Tungabhadra Project, the Mevar hydro-electric schemes etc. In the U.P., the most important scheme is the Pipri Dam and Power Station Project, which, by building a dam across the river Riland, is expected to generate 230,000 Kw. Another important scheme is the Jamuna Hydro-electric Project, which is expected to produce between 40,000 to 50,000 Kw of electrical energy. In Bombay, the most important scheme is the Kayna Hydro-electric Project where one of the largest generating units is going to be constructed, generating 250,000 Kw.

Besides these important projects, quite a large number of minor schemes are being carried out in different parts of the country. In order to regulate the development of electricity, the Government of India have passed the Electricity Supply Act in 1948. Under this Act, the state has assumed control over the generation and distribution of electricity in India. In order to co-ordinate the development, provisions have been made for the setting up of a Central Electricity Authority and of State Electricity Boards. The Central Electricity Authority, which has already been set up, has been entrusted with the duty of co-ordinating and promoting all schemes of development of electricity in consultation with the State Electricity Boards. The State Boards have also considerable autonomy subject to the over-all co-ordination by the Central Electricity Authority.

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Agricultural Resources : As India possesses a large variety of soils and climatic conditions she grows almost all the-

in the electrical and technical industries. Most of our mica output is exported. The production of mica has more than doubled in the past ten years and exports have increased from Rs. 1.5 crores in 1940-47 to Rs. 8.9 crores in 1952-53.

Copper : In India, copper is mined in Singhbhum of Bihar. Small deposits have been found also in Assam, West Bengal, Madhya Pradesh and Madhya Bharat, Madras, Mysore, Rajasthan, Sikkim etc. But the majority of these are not of economic importance. India produced about 6,079 tons of copper in 1952, and has to import it in considerable quantities.

Magnesite : India has excellent deposits of magnesite, to be found mainly in Madras and Mysore. This mineral is used for the manufacture of refractory bricks, special cements and in the chemical industry. The average annual production is about 1 lakh ton out of which about 46,000 tons are exported.

Ilmenite : India has now become the world's leading producer of ilmenite. It is the whitest of all substances and is used in the manufacture of white pigment. It is found in the 'Black sand' of the beaches near Travancore and the Cape Comorin. There is a large export trade in this mineral.

Monazite : It is produced as a by-product of limenite and is available on the beach sands of Travancore and Cape Comorin. India supplies about 88 p.c. of the world's requirement of this metal. It is at present used mainly in the manufacture of gas mantles. Its importance has now increased as it contains small quantities of thorium nucleus which may be used in the manufacture of atom bombs.

Kyanite : India is the principal producer of this mineral which is used mainly in the ceramic and refractory industries. It is to be found in the former Kharasawan and Sraikhela states and in Singhbhum, Behar. Most of the domestic production is exported.

Chromite : This is used mainly in the manufacture of refractory bricks and also in dyeing, calico printing etc. It is found in Mysore, Behar and Orissa.

Bauxite : This mineral is used mainly in the manufacture of aluminium. We have large reserves of bauxite in Behar, Madhya Pradesh, Western ghats and deposits are also widely scattered all over the country. Reserves are estimated to be 250

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We shall now discuss each of the principal crops in detail

Food Crops: (1) *Rice* Both in acreage and yield, rice occupies the most important place among food crops. In 1952-53, more than 74m acres are under rice as compared to about 41.9m acres under jowar and 25.2m acres under Bajra. India probably occupies the first place in the world in respect of the area under rice cultivation, and the second place in respect of total production in the world, the first being China. It is the staple food of the people in the southern and eastern parts of the country. But inspite of such a large output (23.42m tons in 1952-53), India has to import rice from other countries in order to feed her population, and rice is still now being rationed in the main industrial areas of the country. Imports come mainly from Burma, Thailand etc.

(2) *Wheat* The second important food crop is wheat, which was cultivated on about 24.04m acres of land in 1952-53. The total yield has been estimated to be 6.76m tons in 1952-53. Among the wheat producing countries of the world, India occupies the third place in respect of acreage (the first two being the U S A, and Canada), and sixth in respect of the total yield. This shows that the average yield per acre is much lower in India than in many of the important wheat-producing countries. As a result, India has to import large quantities of wheat from other countries.

(3) *Millets* Of the millets, Jowar and Bajra are most important. These are grown more commonly in the dry areas of Madras, Hyderabad, Bombay, M P and the U P etc. These are consumed mostly by the poorer classes in these areas. In 1952-53, about 41.94m acres were under jowar, and 25.28m acres were under Bajra. Unfortunately we have also been forced to import these inferior food crops.

(4) *Barley* It was grown on about 7.5m acres in 1952-53 of which about 5m acres were in the U P. The next important state growing Barley is Bihar where about 1.18m acres were under this crop. Though counted among food crops, this is used mostly in making malt and beer. In early days, India used to export some barley. But we have now to import it in many years.

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Power Resources: One of the most essential factors in the economic development of a country is the supply of cheap power. At present, the usual sources of power are coal, oil and electricity. At one time or another, wind and woodfuel were also used as sources of power. But their importance is negligible.

Coal: Our position with regard to coal has already been examined. Our reserves of low-grade coal are quite ample for all purposes, while those of metallurgical coal may prove inadequate for the future. The main difficulty has been due to the excessive concentration of coal in the eastern parts of the country. As a result, industries in other parts have to pay higher prices for coal on account of the heavy cost of transporting coal by rail. It also results in much congestion of railway traffic, leading to the shortage of wagons in particular periods of the year. One way out of the difficulty is to establish thermal electric generating stations for utilising the low-grade coal whose stock is inexhaustible. This would ease the burden on the railways and result in the production of cheap electricity.

Oil: We are highly deficient in oil as we possess only one known oil-field at Digboi in Assam where small quantities of oil are produced. This deficiency may be remedied in two ways. First, like Germany, we may set up plants for the manufacture of synthetic petrol from lowgrade coal. But this requires highly expensive plants as well as skilled labour. These are two important difficulties. A second way is to set up plants for the manufacture of power alcohol from molasses or starch like maize, potatoes, barley etc. Some attempts have been made in this direction and we are now utilising about 25 p.c. of the molasses for the manufacture of power alcohol.

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(4) *Tobacco* It was grown on about 798 thousand acres in 1952-53 and the output was estimated to be 217 thousand tons. India is the third largest producer of tobacco in the world. It is cultivated all over India, though the chief tobacco-growing areas are to be found in Madras, Bombay and Bihar. Madras produces the best virginia tobacco. There are large exports of tobacco.

Plantation Crops (1) *Tea* India stands second in the world both in respect of acreage and yield of tea. It is grown mostly in Assam, North Bengal, South India and certain areas of the Punjab.

(2) *Coffee* Coffee is grown mostly in Mysore state, Madras and Coorg.

(3) *Rubber* It is grown mostly in Madras, Coorg, Mysore and Travancore-Cochin. The total area under rubber was 149,000 acres and the annual output was estimated to be 17,000 tons. India is deficient in rubber and has to import large quantities from Malay and other countries.

(4) *Cinchona* It is grown on government plantations in Darjeeling and the Nilgiri hills. Production is short of the needs of the country and India has to import considerable quantities of Cinchona.

Over-all Agricultural Situation Of the more important crops, jute, oilseeds and tea are important export crops. Though we produce large quantities of food crops, we are deficient in that respect, and have still to depend on imports. The production of important industrial raw materials like raw jute, raw cotton etc., is also not sufficient to meet the needs of our industries and here also we have to import them in large quantities. The position is not at all happy. Nor is the trend in regard to production a bright one. As the Planning Commission pointed out, the

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In spite of this development, only a small percentage of the potential water-power resources of India has been utilised. Our potential water-power resources have been estimated to amount to about 30 to 40 m. Kwt, which are exceeded only by the USSR. Of this amount barely 1.5 per cent has been developed. No wonder that the per capita consumption of electricity is probably the lowest in India, being 15 Kwts as compared to 3836 Kwts in Canada, 3752 Kwts in Norway, 2880 Kwt in the U.S.A., 2400 Kwts in Sweden, 832 Kwts in the U.K., and 527 Kwts in Japan. Unfortunately, most of the development of electricity in India has taken place to satisfy the needs of the urban areas. Bombay and Calcutta consume between them about 40 p.c. of the total power produced, and only towns with a population of 20,000 on upwards are now supplied with electricity. Consumption of electricity is practically insignificant in the rural areas, as only two villages out of every have been supplied with electricity, and that too is confined mostly to Mysore, Madras and the U.P.

New Hydro-electric Development : In recent years increasing attention is being paid by the government of India to the task of developing hydro-electric resources. The five-year plan lays down great emphasis on this aspect of development, and the projects included in that plan are expected to generate an additional amount of 1.46 m. Kw., of electrical energy,

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Utility of forests. Forests play a very important role in the economic organisation of a country like India. They are an important source of wealth. They supply timber for building purposes and fuel and fire wood for industrial and domestic purposes. They provide raw materials for the match-wood, plywood and paper industries. A large number of forest products like lac, tanning materials etc., are exported to foreign countries, and, therefore, bring in valuable foreign exchange. Lastly, they also provide grazing grounds and fodder for cattle. In addition to these direct advantages, forests are highly important to an agricultural country. Forests influence the climate and induce rainfall. They prevent soil erosion and so add to the fertility of land. Forest leaves fall on the ground and manure the land. They regulate air currents. They absorb moisture and provide protection against the occurrence of floods. It has been stated that the deforestation of the hills in India is one of the most important causes of floods in our country.

Forest Policy in India. The important role played by forests has come to be recognised only in recent times. A consistent forest policy was adopted by the government of India only from 1891. Previous to that period there was reckless destruction of forests, thereby increasing the incidence of drought, flood and soil erosion. But the old forest policy was defective on the ground that it looked upon forests mainly as an important source of revenue, though it recognised that the retention of sufficient forest areas was of primary importance for the purpose of preservation of the climatic and physical conditions. The Planning Commission rightly recognises the need for a positive policy for the administration and utilisation of forests. Attempts should be made to increase the area under forests and afforestation measures should be adopted on a large scale to prevent soil erosion. Along with this, attempts are to

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important crops. We shall now study the general position regarding agricultural crops.

According to the details given in the Five Year Plan, the total geographical area of India consists of 811m. acres, of which statistics are available for only 615m. acres. Of these, the cultivable area comprises about 324m. acres, consisting of 266m. acres of net area sown and 58m. acres of current fallows. If the total cropped area about 78 p.c. grows food crops, 17 p.c. grows commercial crops and 1.1% grow plantation crops and spices.

CROP PATTERN	ACRES	PERCENTAGE OF THE TOTAL CROPPED AREA.
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Food Crops

Cereals	193.04m.	60.58
Pulses	28.47m.	8.98
Gram	18.71m.	5.9
Fruits and Vegetables	5.00m.	1.58
Other Food Crops	1.65m.	.52
	<hr/>	<hr/>
	246.87m.	77.86%

Commercial Crops

Major Oil seeds	26.68m.	8.41
Other Oil seeds	4.27m.	1.36
Cotton	14.56m.	4.50
Sugar Cane	4.21m.	1.33
Jute	1.41m.	.46
Other fibres	1.05m.	.33
Tobacco	.90m.	.28
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	53.12m.	16.75%

CROP PATTERN	ACRES	PERCENTAGE OF THE TOTAL CROPPED AREA.
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Plantation Crops	1.19m.	.37
Condiments and spices	2.46m.	.78
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	3.65m.	1.15%
Other Crops	13.44m.	4.25%
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Total Cropped area	317.08m.	100%
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CHAPTER 3

POPULATION AND ITS GROWTH

The population of India is 361.82 millions according to the census of 1951. This figure includes the population of Jammu and Kashmir and of the Tribal areas of Assam. India occupies the second highest place in respect of population, the first being China with a population of 463.50 millions. It is interesting to study the rate of growth of population in the twentieth century.

Table 1

YEAR	POPULATION (in millions)	INCREASE (in millions)	PERCENTAGE Increase
1901	238		
1911	249	13.55	+5.8
1921	248	-0.87	-0.3
1931	275	27.34	+11.0
1941	319	39.31	+14.3
1951	362	43	+13.4
Total		124	52%

It will be seen that during the last 20 years 1931-51, the increase in population has been about twice the number added during the 30 years 1901-1931. Though the rate of increase in the last ten years i.e., 13.4% is not excessive as compared to some of the western countries it is the net addition to the existing large population which is very alarming. Between 1941 to 1951, the total population of the country increased by 43 millions, which is more than the population of France.

Population in different states - As regards the total population, Uttar Pradesh has the highest number with a total of 63.21 millions, followed by Madras (57.02 millions), Bihar, (40.23 millions), Bombay (35.96 millions), West Bengal (24.81 millions) etc. Both U.P. and Madras have larger population than the U.K.

The rate of growth has also been different in different states. Among the Part A states, the highest increase has taken

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It will be seen that during the last 20 years 1931-51, the increase in population has been about twice the number added during the 30 years 1901-1931. Though the rate of increase in the last ten years i.e., 13.4% is not excessive as compared to some of the western countries it is the net addition to the existing large population which is very alarming. Between 1941 to 1951, the total population of the country increased by 43 millions, which is more than the population of France.

Population in different states - As regards the total population, Uttar Pradesh has the highest number with a total of 63.21 millions, followed by Madras (57.02 millions), Bihar, (40.23 millions), Bombay (35.96 millions), West Bengal (24.81 millions) etc. Both U.P. and Madras have larger population than the U.K.

The rate of growth has also been different in different states. Among the Part A states, the highest increase has taken

these crops, and is grown on about 17.26m. acres of land in 1952-53, as compared to 19.5m. acres under other pulses. Gram is grown mostly in the Punjab, the U. P., Bihar, M. P. etc.

Commercial Crops: These consist of the fibres like Cotton and Jute, Oilseeds, Sugar cane etc.

(1) *Cotton.* Quite a large area (15.67m. acres in 1952-53) is under this crop, and the total output was estimated to amount to 30.56 lakh bales. It is grown mostly in the Madhya Pradesh, Bombay, Hyderabad, Madras, Madhya Bharat etc. Before the partition of the country in 1947, India used to export considerable quantities of raw cotton, mostly short-stapled. But after the partition, the major portion of cotton-growing areas were in Pakistan, and so India had to import raw cotton, both of the short-staple and long-staple variety, from other countries. Of the cotton grown in India, the major portion is of the short-staple variety, though attempts are being made to grow the long-staple variety as well.

(2) *Jute.* Undivided India had a monopoly in the production of raw jute. But the partition left India with only less than one third of the previous acreage under jute. Following the Indo-Pakistani dispute, India has made great efforts to grow more jute, and as a result, the area under jute has increased from 834000 acres in 1947 to 1834,000 acres in 1952-53. It is grown mostly in West Bengal, Bihar, Assam and Orissa. While India has still to import large quantities of raw jute from Pakistan, she is the largest exporter of manufactured jute goods.

Oil-seeds: The most important oil-seeds are groundnut, castor, rape seed, linseed, mustard etc. Groundnut was grown on about 11.86 m. acres in 1952-53, and the total output was estimated to amount to 2.89 m. tons. It is grown mostly in Madras, Bombay, Hyderabad. Madhya Pradesh etc. India exports large quantities of groundnut mostly to the European countries, though in recent years, the amount of exports of groundnut oil is increasing. Sesamum was grown on 5.75 m. acres and linseed on 1.34 m. acres; rape and mustard seeds were grown on 2.37 m. acres. Both linseed and its oil are exported mostly to Australia, Italy and other countries. U.P. is the leading producer of Sesamum, which is exported mostly to the European countries. Rape seed, grown mostly in Northern

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Density of population in the states The density of population varies enormously between different states. This will be evident from the following table —

Table 4

STATE	DENSITY OF POPULATION
Travancore-Cochin	1014
West Bengal	800
Bihar	572
U P	558
Madras	445
Punjab	341
Pepsu	349
Bombay	322
Mysore	308
Hyderabad	226
Orissa	244
Saurashtra	197
Madhya Bharat	170
Madhya Pradesh	163
Rajasthan	117
Assam	108

There are many factors that account for these variations in density. There is, first of all, the influence of the configuration of the land. Areas which are hilly and mountainous region contain a sparse population, whereas the density of population is high in the level plains. The hilly regions in the north of India have smaller density of population than the plains of Bihar, the U P, and West Bengal. A second important factor is the facilities possessed by the region for agricultural development. As the vast majority of the people depend on agriculture for their livelihood, they naturally flock to those places where the rainfall is abundant, or where there are good irrigation facilities and where the soil is most fertile. Thus the plains of West Bengal, Bihar and the U P, where rainfall is more or less adequate and the soil is fertile, contain the highest density of population for an agricultural country. Density of population has increased in those areas like the Punjab after the construction of irrigation works. These factors also explain the low

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area under food grains has shown only a small increase in the forties. Although the gross cropped area had increased as a result of double cropping, little new area has come under cultivation during the last decades. The trend regarding the yield of crops is also indefinite. In regard to commercial crops, the yield is tending to increase. But in respect of food crops, "yields show an increase for certain crops in certain states, a decline in certain others and absence of any perceptible change in the rest."

Forest Resources : Forests also constitute an important source of wealth. Sweden, Finland, Norway and Canada earn large sums of money by selling timber to other countries. Unfortunately India's forest resources are not large in comparison with her size. According to the Five Year Plan, the present area under forests is estimated at 230.79 sq. miles, which is 18 p.c. of the total land area. This is low compared to other countries. The percentage of forest lands to total lands also varies in different states from 74.3 p.c. in Coorg, 47.7 p.c. in Madhya Pradesh to 12.3 p.c. in the Punjab and 13.7 p.c. in Orissa.

There are five different types of forests in India,—viz., *evergreen forests* of teak, ebony, bamboos etc ; *deciduous forests* of the Deccan containing teak, sal, sandal wood etc., *dry forests* of Rajasthan and the Punjab, consisting mostly of shrubs, *hill forests* of oak, deodar, pines, fir etc. ; and *littoral forests* found in the deltas of the rivers, the Ganges, the Mahanadi etc. The government has classified forests into four groups ; viz., protective forests which are necessary for the prevention of soil erosion and floods ; timber forests which yield large revenue ; minor forests which supply mainly fuel, fodder etc. ; and pasture land. They are further classified into reserve forests, protected forests and unclassified forests. *Reserve forests* are controlled strictly by the government. In *protected forests* the local population have rights of grazing and fuel and fodder cutting under the supervision of forest officers. In *unclassified forests* there are no restrictions.

Forest products are of two types, major and minor. Major products are timber and fuel woods. The principal varieties of timber are Sal, teak or Sagun, deodar, toon, jarool etc. Minor products are the essential oils, dyeing and tanning substances, gums and resins, lac, beeswax and honey etc. Oil trees are sandal

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Table 6 contains figures of percentage of agricultural population to total population in the different states of India

Table 6

STATE	PERCENTAGE
Saurashtra	46.6
Travancore-Cochin	54.8
West Bengal	57.2
Bombay	61.5
Punjab	64.5
Madras	64.9
Hyderabad	68.2
Rajasthan	70.9
Madhya Bharat	72.2
Assam	73.3
U P	74.2
M P	76.0
Orissa	79.3
Bihar	86.0

Distribution between town and country Like the occupational distribution of population, the percentage of people living in the urban areas is an index of the industrial progress of a country. As a country becomes more and more industrialised, a larger percentage of the population will be found to be living in the urban areas. For example, in the U.K. about 80 p.c. of the population live in towns. In France which maintains a balance between agriculture and industry 52 p.c. of the people live in the urban areas.

As compared to these countries, the percentage of population of India living in towns is comparatively small. It is only about 17 p.c. in 1951. In the two most industrialised States of Bombay and West Bengal, the percentage of urban population to the total population is only 31.1 and 24.8 respectively. While this clearly bears out the low state of industrialisation achieved by the country, there are certain indications that the rate of urbanisation is definitely increasing in the last two or three decades. Coming to over-all figures, the percentage of urban

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The Government of India have set up a Central Board of Forestry in 1950 for the purpose of evolving a common policy throughout India. The main functions of the Board are to co-ordinate the forest policies adopted by the different states, to regulate and develop forests in inter-state river valleys which are now the concern of the Central Government, to co-ordinate forest research etc. In the same year, the government, initiated the *Vana Mahotsava* ceremony, during which trees are to be planted throughout the country.

Conclusion : This study shows that though our total resources are comparatively large, these have not been developed to the desirable extent. The Indian economy is as yet undeveloped, as a result of which the per capita annual income is very low as compared to that of some of the industrially advanced countries. There has, of course, taken place some amount of industrial development in the last four or five decades. But judged in terms of the country's needs and potentialities, the development is partial and limited. There has been virtually no advance in agricultural production. Old cottage and small-scale industries have been decaying and there is chronic under-employment in the rural areas. At the same time, population has grown rapidly. The result has been the continuation of the poverty of the people. What is now needed is the adoption of measures for the simultaneous development of all parts of the economic system according to a pre-determined plan.

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more males die than females after this age, as a result of which there is an excess of females over males in later ages. But in India mortality rate among women of reproductive age is so high that there is in later ages more males than females. According to the census of 1951, there are 947 females per thousand males in India. Only in the five states of Orissa, Manipur, Madras, Travancore-Cochin and Kutch do females outnumber males. On the other hand, the proportion of females per 1000 males is as low as 844 in the Pepsu, and 863 in the Punjab, and 830 in Coorg. This is the result of very high female mortality rate.

Birth Rates: There are a few points to be noted in relation to the birth rate in India. In the first place, until the year 1941, the birth rate remained more or less steady, though it fell in every other industrially advanced country. Secondly, since 1941 there has taken place some decline in the birth rate, though after this decline it has remained more or less steady. Lastly, even after this decline, the Indian birth rate is one of the highest in the world. These points will be evident from the following tables.

Table 7

Birth Rate Per 1000 Population In India				
1881-91	1921-25	1931-35	1938-41	1945-49
35.9	32.7	34.3	32.5	27.1

Between 1881 to 1935, the average birth rate declined from 32.5 to 15.5 in the U.K., and from 36.8 to 15.9 in Germany. The Indian birth rate remained above 32 till 1941 and then has only declined by about 5 points. It has remained steady round about 26 in the 3 years, 1949-1951.

Table 8

COUNTRY	YEAR	BIRTH RATE PER 1000 POPULATION
India	1951	26.6
W. Germany	1951	15.7
Italy	1951	18.1
Sweden	1951	15.6
U.K.	1951	15.9
Belgium	1951	16.1

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Table 2

STATE	POPULATION (millions)	STATE	POPULATION (millions)
U. P.	63.2	Orissa	14.6
Madras	57.0	Punjab	12.6
Bihar	40.2	Travancore-Cochin	9.3
Bombay	35.9	Mysore	9.1
West Bengal	24.8	Assam	9.0
M.P.	21.2	Madhya Bharat	7.9
Hyderabad	18.6	Saurashtra	4.1
Rajasthan	15.3		

Density of Population in India : Density of population is determined on the basis of the number of people who live on one square mile on the average. This is found out by dividing the total population by the total area of a country. The average density of population in India is 296. This figure is considerably lower than the average density in some of the western countries. For example, the average density of population is nearly 600 in the U.K., 654 in Belgium and 449 in Germany. But these are highly industrialised, whereas India is predominantly an agricultural country. If we compare the Indian density with that of other agricultural countries, we shall find that the Indian figure is rather high.

Table 3

COUNTRY	DENSITY OF POPULATION
India (1951)	296
China	123
Indonesia	108
Brazil	15

The Indian figure is also very high in relation to some agricultural-cum-industrial countries, such as Australia and Canada where the density is 3 per sq. mile, or France where it is 193 per sq. mile. In the U.S.A., density is only 50 per sq. mile.

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Table 10

COUNTRY	YEAR	DEATH RATE
India	1948	17
U K	1949	11.7
Australia	1948	10.0
Canada	1949	9.2
Holland	1949	8.1

This high death rate is due to the comparatively high rates of infant and female mortality. While the rate of infant mortality per 1000 live births is 122.8 in India in 1949, it is only 24.5 in Australia, 29.2 in the U.S.A. (1950), 31.4 in the U.K. (1950) and 22.7 in New Zealand (1950). The Indian rate is exceeded only by Burma where it was 203.8 in 1939, Egypt (138.6 in 1948) and Columbia (134.1 in 1949). In India about one-fifth of the children die before they reach the age of one, and about one-fifth of the total deaths is due to the infant mortality. This high rate is due primarily to the low vitality of the mothers on account of poverty and lack of sufficient food, congestion in cities and ignorance and lack of care of children.

The death rate among women of reproductive age is also very high in our country. According to the Public Health Commissioner for India, the possible death rate among women is 20 per 1000 child births, whereas the figure is about 3 for the U.K. This is certainly alarming and shows a huge waste of life in our country. This high female mortality rate is due to a variety of reasons, such as the lack of proper medical care during and after child births, poverty and malnutrition coupled with excessive pregnancy. A woman's life is held cheap in India even by the women themselves and not much attention is paid to give proper diet and medical care to the women members of the family even among the well-to-do classes.

Expectation of Life - The result of such high death rates is the extremely low expectation of life in India as compared to that in other countries

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Occupational Distribution of Population : The occupational distribution of the population provides an index of the economic progress of a country. As countries become highly developed, a larger percentage of the population becomes occupied in tertiary industries like commerce, transport services etc. ; and a smaller percentage depends on primary industries like agriculture, forestry etc.

The occupational distribution of the population of India shows the relatively undeveloped nature of her economy. In fact, the recent tendency has been some increase in the percentage of population engaged in primary production. In 1931, 68.84 per cent of the total population was engaged in agriculture, whereas by 1951 the percentage has increased to 69.8.

Table 5

Occupational distribution in 1931 and 1951

Percentage engaged in	1931	1951
Agriculture	65.84	69.8
Industry	10.38	10.5
Commerce	5.83	5.9
Transport	1.65	1.5

This should be compared with the percentage of population engaged in agriculture in other countries. It was 6 p.c. in the U. K., 19 p.c. in the U. S. A., 17 p.c. in Belgium, 24 p.c. in Sweden, 20 p.c. in New Zealand, 16 p.c. in Australia and 26 p.c. in Canada.

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This should be compared with the percentage of population engaged in agriculture in other countries. It was 6 p.c. in the U. K., 19 p.c. in the U. S. A., 17 p.c. in Belgium, 24 p.c., in Sweden, 20 p.c. in New Zealand, 16 p.c. in Australia and 26 p.c. in Canada.

method for this purpose is the determination of the net reproduction rate, a concept stated by Mr Kuczynski. This concept is based on the following idea. If we want to know whether each generation is reproducing itself or not, we should find out the total number of only female children born to, (say), 1000 women throughout their reproductive period. If 1000 women give birth to 1000 female children who grow up and complete their reproductive age, it means that each generation is exactly reproducing itself. The net reproduction rate is then equal to unity. If more than 1000 female children are born and grow up, the net reproduction rate is more than one. This will indicate that the present population is more than reproducing itself.

The net reproduction rate is found out, first, by calculating the number of female children born to 1000 women on the basis of the present fertility rate, assuming that each woman lives throughout her reproductive period. This figure is then to be corrected on the basis of mortality tables. We have to make allowance for the fact that as women grow up, a certain number of them die at each stage before completing the full reproductive period.

Unfortunately we do not possess enough statistics to find out the net reproductive rate for India. A number of writers have, however, tried to determine this rate on the basis of certain hypotheses. Mr D. Ghosh has calculated the net reproduction rate to be 1.1 in India. In other words, the Indian population is increasing by 10 p.c. in each generation. The National Planning Committee estimated a higher figure. According to the Committee the rate is 1.45 for India. These estimates are, however, merely tentative.

The question of over-population: The question, whether India is over-populated or not, is a most controversial one. In order to have a clear idea on this subject we propose, first of all, to review certain broad facts about the growth of population in India. The population of India has grown by about 52 p.c. in the first half of this century. The rate of growth was comparatively slow until 1921. But in the last 30 years, the pace of growth has been accelerated. Both the average birth and death rates are very high. Though of late, birth rates have declined to some extent, the fall in the death rates has

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population has increased continuously from 10.3 p.c. in 1921 to 11.0 p.c. in 1931, 14.0 p.c. in 1941 and to 17 p.c. in 1951. Cities containing one lakh or more population have increased in number from 58 in 1941 to 75 in 1951, and their aggregate population has also increased from 16.748 m. in 1941 to 24.085 m. in 1951, an increase by about 50 p.c. as compared to the general increase of 13.4 p.c. during the same period. These tendencies point to an unmistakable shift of the population from the rural to the urban areas.

Age Groups : The distribution of population between different ages can be represented as a pyramid with a broad base and a gradually narrow top. The number of children born represent the base,—the lowest age group. The height of the pyramid represents advancing age groups. As the people die at different ages, the top of the pyramid becomes narrower. In India, the base of the pyramid is very broad, whereas it tapers off sharply at the top. This is due to the fact that the birth rate is very high in our country, and so a very large number of children is born, broadening the base of the pyramid. But as the death-rate is also very high, the shape of the pyramid is extremely narrow. There is a large concentration of population of the lower age-groups and a small survival at the higher age-groups. Thus the number of people below 15 years of age constitutes 38.3 p.c. of the total population of India against 27.1 p.c. in the U.S.A. But people who are above 55 years constitute only 8.3 p.c. of the population in India against 16.9 p.c. in the U.S.A., and above 21 p.c. in France and the U.K.

The immediate aim of the study of age groups is that it would give an idea of the population for which educational facilities upto the age of 15 have to be provided. It would also indicate the approximate number of people who attain working age year to year as against the numbers who complete their working age. We may then estimate the net additions to the working population for whom new jobs have to be found.

Sex Ratio : The sex ratio, revealed in the census of 1951 as also in previous censuses, shows a general excess of males over females, and this has long been regarded as peculiar to India. The explanation is that in India, more male children are born than females. Upto the age of 12, mortality rate among females is less than that among males. But in foreign countries

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to the growth in population. The area under food-grains decreased from .87 acres per head during 1913-14 to .61 acres per head during 1942-43. While the population of India increased by 27 p.c. during the 20 years 1921-41 there has been a decline in the cultivated area by 5.8 p.c. during the same period. The extent to which the growth of industries, trade and commerce has afforded avenues of employment to the growing population is, however, comparatively small. In spite of the expansion of a few industries like iron and steel, cotton, sugar, jute etc., industrial employment has not increased materially in the country. As a result, the pressure of population has increased in the rural sector and this is borne out by the statistics of occupational distribution furnished by the 1951 census, according to which, the percentage of population dependent on agriculture has actually increased between 1931 to 1951. Secondly, the density of population cannot be regarded as low for an agricultural country like India. Moreover, though the per capita income has shown a small increase over the decades, very few people would doubt the proposition that had the population of India grown at a smaller pace, the per capita income would have increased at a larger rate. The statement that India possesses large undeveloped resources is not relevant in this context. The real question is, given the present rate of development of the resources of the country, is India in a position to support a rise in population by more than one per cent per year? If the pace of development quickens in India, if her cultivators produce more food and other crops per acre of land, and her manufacturers and labourers turn out more goods in the factories and mines at a lower cost, India will no doubt be able to support a larger population on a rising standard of living. But this does not support the proposition that the present rate of growth of population is not excessive on the basis of the present rate of development of our resources.

There are many other indications of the existence of the pressure of population in the country. The comparatively high birth and death rates, wide-spread malnutrition and the existence of millions of people on a sub-human level,—these are all important indications. None of them is of course conclusive. But when all these evidences are studied together, very few economists will deny the existence of a serious pressure of population in our country.

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There are of course other countries where the birth rate is higher than that in India ; for example, in Ceylon (40.6), Egypt (42.6), Mexico (44.6), Philippines (32.4) etc. According to some writers, *e.g.*, Dr. Gyanchand, Mr. D. Ghosh, the Indian birth rate is under-estimated as not all births are reported to the authorities. The actual birth rate would be in the neighbourhood of 40 and above.

What are the *causes of such high birth rate* ? It is remarkable that the birth rate is so high in India in spite of the fact that there are certain factors which actually retard births. For example, the practice of early marriage often results in some women becoming widows at an early age. The absence of widow remarriage is also an important factor which ought to lead to smaller birth rate. Moreover, the practice of prolonged lactation and the wide-spread prevalence of many diseases lower the vitality of people and so impair the fertility of women. But in spite of these factors, the birth rate is undoubtedly high. The main cause of such a high birth rate is the prevalence of the practice of universal and early marriage in our country. In the opinion of many experts, fertility is comparatively high for women between the ages 15 to 30. About 80 p.c. of the girls between the ages 15 to 30 are married in India against 41 p.c. in the U. K. Thus a larger percentage of girls is married in the most fertile period of a woman's life in India than in the western countries. Lastly, the wide-spread adoption of birth control practices is responsible for lower birth rates in the western countries. But the vast majority of the Indians are both too ignorant and too poor to adopt birth control in any form.

Death Rates : While the fall in the birth rates in India has been comparatively slow in India, the death rates have, however, declined by a larger percentage. This is evident from the following table.

Table 9

	1881-91	1921-25	1931-35	1945-50	1951
India	27.4	26.0	23.8	18.5	16.7

Thus the death rate has fallen by a substantial percentage between the years 1931 to 1951. This is due to the improvements in medical services in the country. But in spite of this

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population and a very low per capita income. The rate of capital formation is very low. The pace of economic development, which depends on capital formation, cannot be made quick enough to absorb the growing population and ensure a higher standard of living. Hence there is an imperative need for framing a positive population policy, aiming at a judicious control of the birth rate.

Family Planning. Any programme for ensuring a higher standard of living for the masses must, therefore, contain proposals for family limitation. The vicious circle of poverty and pressure of population can only be checked by a two-pronged drive—the adoption of a plan for economic development and control of the birth rate by various methods. Voluntary restraint on the part of married couples and late marriages will not solve the problem. It is only the positive birth control methods that will prove effective in checking the birth rate. Family limitation is also essential in order to secure better health for the mothers and better care and upbringing for the children.

There will, of course, be certain difficulties in regard to the adoption of a positive programme of family planning. The first is the extreme ignorance and conservatism of the masses. The second is their poverty. The masses do not possess the means of buying the birth control devices which are available in the market. The third is the danger to the future quality of the race. It has been urged that while the intelligent people will control birth, the ignorant and the weak will go on multiplying at the same rate as before. So the number of intelligent and strong people may thus fall off in the next generation or two.

These difficulties point to the need of the state itself playing a considerable part in popularising different methods of family planning. Attempts should be made to discover suitable methods of family planning and devise methods for securing a wide dissemination of the knowledge of these methods among the masses. All known devices of publicity—the press, the cinema, the radio etc., should be asked to carry on propaganda among the masses so as to make them conscious about the existence of the problem of population and to inform them about the merits of the various techniques of family planning. All government hospitals and public health agencies should have clinics where people can get proper advice on the most suitable method of

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COUNTRY	AVERAGE EXPECTATION OF LIFE
India	32.45
Egypt	35.65
Mexico	37.92
Australia	66.02
Canada	65.18
Sweden	67.06
U. K.	66.39

Thus the average expectation of life in India is probably the lowest in the world. This is due to the high rates of infant and female mortality and to the extremely low standard of living of the general masses. Moreover, while in other countries the average expectation of life is higher among females than that among males, the situation is just the opposite in India.

Table 12

COUNTRY	AVERAGE EXPECTATION AMONG MALES	AVERAGE EXPECTATION AMONG FEMALES
India	32.45	31.66
Egypt	35.65	41.48
Australia	66.07	70.63
Sweden	67.06	69.71

One encouraging feature is that the latest figures of the average expectation of life in India on the basis of 1951 census data record an increase of more than 5 years during the last 20 years. According to the 1931 census, average expectation was 26.91 among males and 26.56 among females. The lower average expectation of life among women is probably due to (a) the social custom of bestowing better care on male children, and (b) the impact of high maternal mortality between the ages 20 to 45.

Net reproduction rate: While a study of the average birth and death rates is important, it does not enable us to see the correct trend of the growth of population. The best

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Causes of food shortage: The present food situation is the outcome of a number of factors, of which mention should be made of the consistently growing population, the almost stagnant food production, the partition of the country and a number of acts of God in the form of floods, droughts and cyclones. During the last 50 years our population has increased by more than 50 p c, while the production of food grains by hardly 20 p c. During the last ten years 1941-51, population increased by 13.4 p c., while food production rose by a mere 3.2 per cent. The establishment of Pakistan left us with about 82 p c. of the total population, but with about 68 p c of rice production and 65 p c. of wheat production, and 75 p c of the total cereal production. Thus the partition of the country accentuated the food scarcity. Lastly, the years 1947-52 witnessed an unprecedented series of national calamities in the form of floods, droughts and cyclones, which reduced food production and so added to the complexity and intensity of the problem

The result has been a widening gap between food supply and population, a gap which had to be met partly by cutting down food consumption and partly by importing foodgrains. Imports of foodgrains amounted to 2.84 million tons in 1948, 3.71 million tons in 1949, 2.12 million tons in 1950, 4.73 million tons in 1951 and 3.90 million tons in 1952. The imbalance between population and food supply can also be verified by cultivated area in reference to land-man (i.e. land per head of population) relationship. In 1911-12 the total cultivated area per head of population was .88 acre. It is now only .76 acre per head and the net area under food grains is only .56 acre per head. It has been estimated that the minimum area required for producing food crops is at least 63 acre per head on the basis of the present levels of consumption and the standard of cultivation. So the deficit on account of land-man relationship comes to about 12 p c.

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Quite a large number of writers have, on the other hand, expressed the opinion that our country is not overpopulated. They point to the fact that though the population of India has grown by 52 p.c. between 1901-1951, this is lower than the rate of growth in the European countries. Thus during 1880-1930 the population of India increased by only 39 p.c., while that of the U. K. rose by 54 p.c., of Japan by 74 p.c., and that of the U.S.A. by 186 p.c. Secondly, the density of population is also smaller than that in many other countries like the U. K., Belgium etc. Thirdly, estimates of per capita income framed at different periods in our country, show that it is rising, though of course at a very slow rate. Lastly, India, it is claimed, has large natural resources, which are to be found in very few countries.

While these arguments influence a large number of individuals, it should be remembered that it was not always the growth in percentages but the actual growth in numbers of people who had to be fed that was significant. The growth of population, calculated in terms of percentages, may be less in India than in the European countries. But as India's population is already very large, growth in small percentages means actually increase in large numbers. The relevant question is, whether the growing population can be supported by the available resources of the country without a lowering of the general standard of living? The population of Europe has no doubt increased by a larger percentage. But so great has been the pace of economic development in Europe that the standard of living of the masses actually rose during this period. So the rate of growth of population has to be compared with the rate of economic development. Judged by this test, the case against over-population is not very hopeful. There is no evidence that the average standard of living has risen in India during the last 50 years, in spite of a small problematical increase in the per capita income. The food-supply has not grown in proportion

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pressure on the land, little new waste area has come under cultivation, from which the conclusion would appear to be that the reclamation of any large waste calls for special effort beyond the capacity of the individual farmers." Something can be achieved by colonization on, and mechanised cultivation of these lands. But there is no doubt that reliance has to be placed mostly on intensive cultivation of existing land. Stress should be laid on the construction of minor irrigation works, conservation of farm yard manure, and possibly by adopting the Japanese method of cultivation. Some attention should also be paid to the development and popularising of cheap, subsidiary foods like sweet potatoes, tapioca etc.

The long-term solution should provide for a better land-man relationship. Attempts should be made to increase the yield from land through the construction of large-scale irrigation works, application of cheap artificial manures and the adoption of scientific methods of cultivation etc. To secure a more balanced diet, attention should be paid to the development of poultry and fishery and an increased production of milk and animal fats. A change in food habits has to be brought about through education in the science of nutrition. The long-term solution must embrace proposals for limiting the growth of population. Through education and propaganda, people should be made conscious of the essential fact that the size of the family has to be regulated in harmony with rationalised individual desires and social needs of the time.

Lastly, it should be remembered that the ultimate solution of the food problem depends essentially on the general economic improvement of the country. An increase in food production depends immediately on the adoption of agricultural improvements; and the latter, in their turn, must be conceived as an integral part of the much wider problem of raising the level of rural life. Agricultural improvement is inextricably linked up with a whole set of economic and social problems. A solution has to be found in the simultaneous adoption of a two-fold programme,—firstly, increasing the yield per acre by steadily improving agricultural methods and promoting an intensive system of mixed farming, and secondly drawing away the surplus population from land into industries through the development of cottage and small-scale industries, large industries and tertiary occupations.

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Many British writers who argued that India was over-populated seemed to imply that if only the growth of population was held in check in our country, all our problems would be solved. But this is not correct. Our economic problems would remain even if the growth of population was checked. At the other extreme, those who argued that India was not over-populated seemed to imply that if only the pace of economic development was quickened, the problem of population would be automatically solved. This is also a wrong position to take up. The task of ensuring a higher standard of living for the masses in India cannot be satisfactorily performed unless a simultaneous attack is launched on both fronts,—that of the development of resources and of the growth of population. We must recognise the truth of the proposition that a higher standard of living would be difficult of achievement unless the growth of population was checked along with the adoption of special measures for the development of our resources.

Suggested Remedies for Over-population: It is well-known that both the birth and death rates are comparatively high in our country. There are indications that economic development in the future is likely to increase the pressure of population in the near future. As economic development proceeds, a large majority of the people would enjoy higher standard of living, and have better food, housing and clothing and medical care. This is likely to accentuate the trend towards declining death rates. If, at the same time, the birth rate does not decline proportionately, population will tend to grow at a faster rate, putting a great strain on our resources. This has been the experience in Europe in the 19th century, where birth rates remained at a high level for three-quarters of a century even after a substantial decline in the death rate. The same thing is going to happen in India unless special steps are taken to control the birth rate. Europe did not suffer in spite of the accelerated rate of growth of population, because its aggregate population was comparatively small when the industrial revolution began in that continent. The pace of economic development was quick, while the growth of population in absolute numbers (apart from percentages) was small. So Europe was able to enjoy a higher standard of living in spite of the growth of population in large percentages. Conditions are different in India at the present moment. She has already a very large

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CHAPTER 4

THE SOCIAL STRUCTURE AND THE ECONOMY

Man has always lived in society, and the social Institutions exercise a profound influence over his activities. Hence in order to get a complete picture of the operations of the Indian economic system, it is necessary to study the socio-religious ideals and institutions which have been evolved in India.

The social organisation in India is characterised by the presence of two peculiar institutions, the caste system and the joint family system, both of which exercise some influence over the economic activities. In addition, notice should also be taken of the systems of inheritance prevalent in India and the religious ideals, all of which have some peculiarities of their own.

The Caste system. The most important characteristic of our social organisation is the existence of the caste system. It is one of the oldest institutions among the Hindus. A caste may be defined as consisting of a group of families bearing a common name, and generally following a specific occupation. The people of one caste must marry within the same caste and there are also restrictions regarding inter-dining with people belonging to other castes. Another peculiarity is that certain castes are regarded as high, while some castes are low or even untouchable. Birth determined one's caste irrevocably and people belonging to one caste must always remain in the same caste.

There are many speculations regarding the origin of this system, most of which are of no concern to us. Whatever its origin, there is no doubt that in the early societies, the system yielded some important advantages. By prohibiting marriage outside each group, the system had enabled the Aryans to maintain the purity of their racial stock. Moreover, it exercised a stabilising influence in early societies. Under the operation of this system, men belonging to so many races who lived in India crystallised into different castes. Each caste had, therefore, its proper place in the social organisation, and soon learnt to live side by side in a spirit of fellowship. In addition to these sociological aspects, the caste system gives rise to some economic benefits. First, it enabled the society to secure the benefits of

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POPULATION AND FOOD RESOURCES

The Bengal famine of 1943 and the chronic food shortage from that year, the need for importing large quantities of food grains and the pressure of population have drawn everybody's attention to the "food problem" of our country. It is therefore, necessary to examine the nature of this problem, and the relationship between our growing population and the almost stagnant food production.

The problem of food and population has three aspects. In the first place, there is the question of securing an adequate supply of the essential foodgrains to maintain the existing low level of consumption for a rapidly growing population. This is the purely quantitative aspect of the problem. Secondly, there is the problem of filling the gaps in food consumption so as to bring the average diet to a physiologically adequate standard. This is the qualitative aspect of the problem. Lastly, there is the necessity for raising the average standard so as to enable everybody to enjoy a properly balanced diet, instead of the present miserable level of consumption. This is our ultimate goal. The problem has, therefore, immediate as well as long-term aspects. The immediate task is to satisfy the obvious hunger of the growing population by increasing the quantity of the basic foodgrains. We must seek to convert this 'deficit' into 'hand-to-mouth' economy. The long-term objective will be to provide an adequate and balanced diet for all.

It should be noted that food shortage is not a recent phenomenon. If we exclude Burma, India had been forced to import food grains from the end of the first world war. During the 5 years 1920-25, India imported .16 m. tons of foodgrains, and the imports increased to 1.39 million tons during 1935-1940. The position was concealed upto 1937 on account of the inclusion of Burma, a surplus rice-producing country, in India. The fact that India was a food importing country became obvious after the separation of Burma. The position was, however, not serious on the eve of the second world war

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non-competing groups. The people who belong to the so-called higher castes generally possess a contempt for manual labour. They do not like to take up occupations which are supposed to be reserved for the so-called lower castes. The system is thus indirectly responsible to some extent for the middle class unemployment. The educated middle classes do not like to take up skilled jobs or occupations in trade and industry. They prefer the clerical or white-collar jobs as befitting their gentlemanly status. But these occupations are already over-crowded. Lastly, while the economic effects are thus bad, the political implications of the system are even worse. The system is responsible for the existence of the problem of the depressed classes,—the so-called untouchables. It has thus meant a deplorable waste of the human talents and potentialities of the untouchables. It has created a great social cleavage between the different sections of the population.

The Caste system in recent years: The impact of the western civilisation is slowly undermining the regours of the caste system. The growth of communications and the construction of roads and railways have brought about an economic transition in India. The traditional village industries declined, and people have been forced by economic necessity to move out to the new cities and factory areas and to take up other occupations. Travel in railways has forced many people to give up some of the cherished caste rules. Urban life has resulted in the intermixing of various castes, many of which had to give up some of their rigid prohibitions. The spread of the liberal English education, and the attendance in the same class of pupils belonging to all castes, have all served to loosen the beliefs underlying the caste system. Many of the reformist movements among the Hindus have also disapproved of the caste system and insisted on inter-marriage among the different castes. While there is no doubt that all these forces have undermined the caste system, it is, however, questionable whether it will die out completely. The masses living in the villages still now cling to this system, and even the educated classes have not been able to free themselves completely of the prejudices of this system. But in spite of this, the economic defects of the caste system have been removed to a large extent. It no longer prevents the mobility of labour as people in large numbers have given up their caste professions and adopted other jobs.

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Studying the problem on a regional basis, only six states (viz, Assam, Bhopal, Coorg, Madhya Pradesh, Orissa and Pepsu) including about 28 p.c. of the total area and 18 p.c. of the total population are normally surplus, while the remaining states, containing 72 p.c. of the area and 82 p.c. of the population are deficit in food production.

This is the extent of estimated food shortage from the quantitative point of view. If the aim is to provide a balanced diet for the average population, our deficiency in respect of the various kinds of food stuffs has been estimated as follows :—

ITEMS	QUANTITY (MILLION TONS)	PER CENT OF TOTAL PRODUCTION
Cereals	6	10
Pulses	1.5	20
Vegetables	9	100
Milk	70	300
Meat, Fish and Eggs	4.5	300
Fats and Oils	5.0	250
Fruits	3.0	50

Remedies : The immediate problem is thus to provide a minimum subsistence diet to the growing population. We have to adopt measures for securing a rapid increase in food production, both on a short-term and long-term basis. This can be done in two ways : by bringing more land under cultivation and by increasing the yield from land. There are large areas in our country which are classified as cultivable waste. It has been suggested that if these areas are brought under cultivation, food production can be increased to a considerable extent. But as the Planning Commission have observed, "Despite increased

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money, so many people will be put to difficulties. So he may prefer to invest safely. Hence capital for investment in risky enterprises may not be forthcoming and the economic progress of the country suffers as a consequence. Moreover, the system tends to encourage conservatism and frowns upon individuality. The joint resources of the family are administered by the head of the family, who is usually the eldest male member. Old people are usually conservative in nature and discourage individuality among the younger members. Lastly, the system leads to frequent quarrels and much unhappiness. Members who earn more may grudge others who earn less or are idle. The peace and happiness of the family may thus be broken on many occasions by frequent quarrels born out of jealousies.

The system is, however, breaking down rapidly under the impact of economic forces. The influence of western education, the acute struggle for existence and the growth of individualistic spirit,—all these factors have combined to cause disintegration of the joint family system.

The Laws of inheritance: In the western countries, the eldest son usually inherits the property of the father. But in India, the law of inheritance recognise a large number of heirs. Among the Hindus, there are two different systems of inheritance—the *Dayabhaga* and the *Mitakshara*. Under the *Dayabhaga* system, which prevails in Bengal, the father is the absolute owner of the property, both ancestral and self-earned, and on his death, all his sons get equal shares in the property. Under the *Mitakshara* system, the property is owned jointly by all the male members, and the father is merely the manager of the property. All sons are equally owners from the moment of their birth. Under the Muslim law of inheritance, the property is divided among a large number of heirs, including sons, daughters and parents.

So the Indian laws of inheritance recognise a large number of heirs as against only one recognised by the western laws of succession. The Indian system has its merits and demerits. First, it has secured a wider distribution of property and so prevents great inequalities of wealth and income. Every son is assured of something to start with on the life's adventure, while none has enough so that he can stay idle. As each son's share is small, he has an added incentive to work hard in order to maintain his accustomed standard of living.

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QUESTIONS

1. Discuss the factors which determine the density of population in India. (Agra. 1936 ; Cal. 1935 ; Mad. 1938 ; Nag. 1939 ; Panj. 1938, 1951 ; Gau. 1952).

2. Is India over-populated ? If so, what remedies would you suggest to solve the problem ? (Ag. 1937 ; Alld. 1936 ; Cal. 1942 ; Panj. 1939 ; Delhi. 1950, 1952).

3. Do you agree with the view that the rapid growth of population in India stands in the way of economic progress ? Give reasons for your answer. (Del. 1953).

4. Bring out clearly the correct nature of the present population problem of India. In the light of your analysis, what should be the proper population policy for the country ? (Mad. 1953).

5. Make out a case for population control in India. (Kash. 1953).

6. Do you think that India is subject to increasing population and diminishing food at the present moment ? Explain. (Panj. 1953).

7. Write a brief note on the food situation in India. (Panj. 1953).

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NATIONAL INCOME OF INDIA

In the previous chapters we have discussed the resources in men and materials that are available for the development of our country. These provide the basic facts in a study of Indian economics. Our next task will be to determine the national income of India. Labour and capital of a country, working upon its natural resources, produce in every year a certain net aggregate of products and services. This is the national income of the country. Estimates of the national income and of its constituent parts serve a large variety of purposes. "They provide an index of economic activity and an instrument of economic planning. They show how incomes are earned and on what they are spent. They also show the distribution of income between classes. They can be used to measure the prosperity of one country with another or the prosperity of the same country at different stages in its history." If one knows the income of an individual, one can make a "rough guess as to his political opinions, his tastes and education, his age and even his life expectancy." Similarly we can know a lot about the economic conditions of the people of a country if we have information about its national income and the actual distribution of that income.

Estimates of the National Income of India: Attempts have been made from time to time to estimate the per capita income in our country. These estimates formed before 1947 are given below.

TABLE I

<i>Name of the Person making the estimate</i>	<i>Year or years for which the estimate is made</i>	<i>Per Capita Income Rs. as p</i>
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Lord Cromer	1882	27 8 0
Digby	1895-99	17 8 5
Lord Curzon	1900	30 0 0
Wadia and Joshi	1913-14	44 5 0
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Shirras	1921	107 0 0
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division of labour, as each caste specialised in one particular occupation. Secondly, one result of the caste system was the provision of an inexpensive and efficient method of training for the young apprentices. As the children follow the caste profession, they can learn everything about that particular occupation from their parents, and so have not to pay heavy premia in order to become an apprentice as is the practice in the western countries. The hereditary pursuit of occupations helped to preserve and increase the skill and dexterity of the workers. Thirdly, as the children know the profession they will follow, they escape the worries and uncertainties which the search for a career occasions. Lastly, the caste guilds performed many of the functions of the trade guilds of mediaeval Europe. They laid down suitable conditions for the practice of their professions, protected the interests of the members, and helped others who had fallen in distress.

The system has, however, given rise to grave evils which are hampering the economic progress of the country. Its greatest economic defect has been that it results in hindering the free mobility of labour. Under a rigid caste system, children must take up the caste profession. It is quite possible that the demand for the services of potters is declining. But a potter's children must follow in the foot-steps of their father, even though the goods produced by their labour do not find ready buyers. In the opposite case, let us suppose that the demand for the services of potters increases considerably. Unless potters have more children, it will not be possible to increase the supply of potters. Unless one is born into a caste, one cannot adopt the profession special to that caste. As a result, mobility of labour becomes restricted and it becomes difficult to adjust the supply of different grades of labour to the changes in demand. Secondly, the principle of heredity, which forms the basis of the caste system, is also defective on another ground. There is no guarantee that a potter's son will also inherit the skill necessary for that profession, nor is there any certainty that he will like the potter's trade. He may, on the other hand, like to become a carpenter and may possess the necessary skill. But he cannot become a carpenter and must remain a potter. The caste system may, therefore, be responsible for many misfits in the economic organisation. Thirdly, the system has created a number of serious problems by dividing the society into water-tight,

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Rs 3,650 crores in 1948-49, and the per capita income at Rs 246.9. The final report also gives details of national income for the years, 1948-49, 1949-50 and 1950-51.

TABLE II

National Income of the Indian Union by industrial origin
(In '000 Crores)

<i>Items</i>	<i>1948-49</i>	<i>1949-50</i>	<i>1950-51</i>
<i>Agriculture</i>			
Agriculture, Animal husbandry and ancillary activities	41.6	43.8	47.8
Forestry	0.6	0.7	0.7
Fishery	0.3	0.4	0.4
Total of agriculture	42.5	44.9	48.9
<i>Mining, manufacturing and hand trades.</i>			
Mining	0.6	0.6	0.7
Factory establishments	5.5	5.4	5.5
Small enterprises	8.7	9.0	9.1
Total of mining etc	14.8	15.0	15.3
<i>Commerce, transport and communications ;</i>			
Communications (Post & Telegraphs)	0.3	0.3	0.4
Railways	1.7	1.8	1.8
Organised banking and Insurance	0.5	0.6	0.7
Other commerce and transport	13.5	13.9	14.0
Total of commerce etc	16.0	16.6	16.9

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<i>Agriculture</i>			
Agriculture, Animal husbandry and ancillary activities	41 6	43 8	47 8
Forestry	0 6	0 7	0 7
Fishery	0 3	0 4	0 4
Total of agriculture	42 5	44 9	48 9
<i>Mining, manufacturing and hand trades .</i>			
Mining	0 6	0 6	0 7
Factory establishments	5 5	5 4	5 5
Small enterprises	8 7	9 0	9 1
Total of mining etc	14 8	15 0	15 3
<i>Commerce, transport and communications ;</i>			
Communications (Post & Telegraphs)	0 3	0 3	0 4
Railways	1 7	1 8	1 8
Organised banking and Insurance	0 5	0 6	0 7
Other commerce and transport	13 5	13 9	14 0
Total of commerce etc	16 0	16 6	16 9

The Joint family system : Another special characteristic of the Indian society which has some economic implications is the joint family system. In the west, a family usually consists of the man, his wife and unmarried children. When the son marries, he no longer lives with his parents. Not so in India. Here a family is joint in the sense that all brothers with their wives and children live together along with their parents, uncles and aunts. There is a common kitchen and common property.

The system possesses some advantages. In the first place, as many people live and eat together, there is some saving in expenses. The expenses become less per head when many people live and dine together. Secondly, it tends to counteract the effects of the laws of succession. So long as the joint family system remained effective, the problem of sub-division and fragmentation of land did not become acute. Thirdly, the system provided a good deal of social security to the people. The resources of all the members of the joint family helped to support the sick and the infirm, the unemployed and the old people. Members, therefore, enjoyed some protection against sickness, incapacity, unemployment and death. Lastly, the system tends to encourage the growth of the virtues of self-sacrifice, and co-operation among the family members. The members of the ideal joint family work on the principle of "each according to his need". They co-operate with each other and make suitable sacrifices to promote the interests of all members. These are desirable social virtues, and the system thus embodies many of the principles of a communistic society without its co-ercive nature.

But the economic implications of the system are not all beneficial. While the provision of security for all members against want, illness etc. is a desirable feature, it may have the unfortunate effect of encouraging idleness. When everybody knows that he can depend on the joint family, he may not exert himself. Thus the system may be responsible for the loss of initiative and enterprise. Secondly, in a joint family, members who earn a large income, have to share it with others. So they may not be in a position to save large sums of money. As a result, the volume of savings becomes small and this hampers the growth of capital. Thirdly, when a man has to support a large number of members, as in a joint family, he may be afraid to take up risky enterprises. If these fail and he loses his

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activities including public enterprises Table III gives figures of per capita income in each of these years

TABLE III
(In crores of rupees)

Items	1948-49	1949-50	1950-51
National Income	8650	9010	9530
Population	350.38	354.82	359.33
Per Capita Income	246.9	253.9	265.2

Though the per capita income registered a rise in monetary terms during this period, there has been no significant change if adjustments are made for price changes

Methods followed for estimating national income: Two methods are usually followed in calculating the national income of a country. According to the first method, an attempt is made to determine the sum total of income earned by the total working population of the country. This is the *income method*, which adds up the wages of workers, plus interest on loans and securities plus rents and royalties, plus corporate profits plus the net income of unincorporated business units. According to the second method, known as the *census of production or inventory method*, an attempt is made to find out the total net value of all goods and services produced in a given year.

The National Income Committee found that it was not possible to use either of these methods in India on account of the non-availability of data. We do not possess adequate statistics of total production in all industries, and the number of income tax payees are comparatively small in relation to the total population. Hence the committee have followed both these methods as and where statistics are available. "We have, therefore, estimated the total working force in 1948-49 and its distribution among different occupations. This occupational classification is made on the basis of the classification of the economy by industry, including under the term, industry; also agriculture, services and all other means of income generation. The inventory method is applied to as many sectors of the economy as possible, the

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Religion and its economic impact : It has been stated by a number of western writers that the peculiar religious outlook of the Hindus is one of the most important causes of poverty in India. The Hindus have a fatalistic outlook on life and their religion teaches them to be other worldly. But this is not correct. Poverty is not due to the fatalistic outlook of the people. On the contrary, it is extreme poverty which has bred fatalistic outlook among the people. The religious outlook of the Hindus is not the cause of their poverty. The Christian religion also preaches asceticism. In ancient days, when the sway of religion was stronger than at present, the Indians amassed huge wealth, traded with the world and manufactured a large volume of goods. In fact, it was the wealth of Ind that attracted the foreigners to India in those days. Religion did not prevent the people from becoming rich in those days. The causes of Indian poverty must be sought elsewhere than in the religious outlook of the Indian people.

QUESTIONS

1. Describe the important features of the social structure of the people of India. Examine their influence on our economic life. (Cal. 1944 ; Panj. 1949 ; Del. 1951).
2. Discuss the economic implications of the caste system. What are the factors tending to break it up ? (All. 1933 ; Cal. 1933 ; Panj. 1943).
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Hence the estimate of the national income of India is bound to be largely tentative. This is bound to be so until additional data are collected to fill the many gaps in our knowledge of the different sections of the economy. The committee have justified their "estimates, however tentative they may be, on the ground that the only way to make progress in this field is to make the best use of what is available and in the process point to the directions in which there is need for collection of additional data or for additional analysis."

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In the first report, the Committee have sought to make an estimate of the national income for the year 1948-49. The total national income for that year has been estimated to amount to Rs. 8710 crores. Income from agricultural sources was estimated to be Rs. 4150 crores; from mining, manufacturing and hand trades was Rs. 1,500 crores; from commerce and transport was Rs. 1,700 crores; and from other sources was Rs. 1,380 crores. In other words, agriculture, industries, commerce and transport and other services contributed 47.6 p.c., 17.2 p.c., 19.5 p.c. and 13.8 p.c. respectively to the total national income. The total income from these sources amounted to Rs. 8,730 crores from which Rs. 20 crores were to be deducted on account of the adverse balance of payments on income account. The resulting total was Rs. 8,710 crores. Since the aggregate population was estimated to be 341 crores the per capita income came to Rs. 255 in 1948-49.

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While the number of people dependent upon land has been increasing, the net area sown has not materially increased except in the U.P. The total cropped area has lagged far behind the growth of population. In spite of this pressure of population, very little expansion of cultivation to waste lands has taken place. This seems to indicate that the available cultivable waste lands do not generally lend themselves to reclamation within the present resources of the cultivators.

Lastly, the yield of crops per acre of land is extremely low. This will be evident from the following table.

Yield per acre in some countries

Rice	India	690 lbs	(1949-50)
	Burma	1216 lbs	} (1948)
	China	2243 lbs	
	Japan	3321 lbs	
Wheat	India	585 lb	(1949-50)
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Cotton	India	72 lbs	(1949-50)
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<i>Items</i>	1948-49	1949-50	1950-51
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Professions and liberal arts	4.3	4.5	4.7
Government services (Administration)	4.0	4.1	4.3
Domestic Service	1.2	1.2	1.3
House property	3.9	4.0	4.1
Total of other services	13.4	13.8	14.4
Net domestic product at factor cost	86.7	90.3	95.5
Net earned income for abroad	-0.2	-0.2	-0.2
Net National output at factor cost-National Income	86.5	90.1	95.3

The report also gives other interesting information. For example, small (largely household) enterprises contributed nearly 61.3 p.c. of the net domestic output, and large (generally joint-stock companies) enterprises produce about 12 p.c. of the net domestic output. Thus the relative importance of small enterprises is quite clear. Another interesting point is that our foreign trade constitutes a comparatively small part of our national income. Exports and imports varied between 5 to 7.5 p.c. of the net national product gross of imports.

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The poverty of the cultivators is also responsible for another defect. The fertility of land has deteriorated to some extent on account of continuous cropping without manures. The cultivators are too poor to buy the artificial fertilisers in sufficient quantities. Cowdung is used as fuel, while their prejudices stand in the way of the use of bones, night soils etc. as manures. As a result, fertility of land is declining.

The soil in India is dry and will not yield good crops unless water is applied in sufficient quantities. But the supply of water is inadequate. Only 19 per cent of the total sown area is irrigated, while the remaining land has to depend upon the monsoons for the supply of water. But the monsoons are uncertain and irregular and all parts of the country do not always get proper rainfall. The consequent lack of water is one of the most important defects of agriculture.

The systems of land tenure which were prevalent until recently do not leave the cultivators with sufficient incentive to improve the cultivation of land. The majority of the actual cultivators are tenants and have to pay high rent to their landlords. Hence they do not feel that they have any stake in land and do not exert themselves to improve cultivation.

The Indian cultivator is no doubt as hard-working as the farmer of any other country. He is also shrewd and intelligent. But he is, as a rule, illiterate, and so he has no knowledge of modern methods of cultivation.

There are also other defects in the agricultural organisation. Finance is the life-blood of every organisation and the supply of finance is inadequate in the rural areas. Cultivators are extremely poor and so are forced to depend on outside sources of finance (mostly money-lenders) for meeting their essential needs. As a result, most of them are heavily involved in debts and cannot afford to spend money for making improvements in land. They have to pay interest at very high rates on these loans, and this eats up a very large slice of their already small

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are not careful about the kind of seeds they use. The use of inferior seeds leads to low output.

The poverty of the cultivators is also responsible for another defect. The fertility of land has deteriorated to some extent on account of continuous cropping without manures. The cultivators are too poor to buy the artificial fertilisers in sufficient quantities. Cowdung is used as fuel, while their prejudices stand in the way of the use of bones, night soils etc. as manures. As a result, fertility of land is declining.

The soil in India is dry and will not yield good crops unless water is applied in sufficient quantities. But the supply of water is inadequate. Only 19 per cent of the total sown area is irrigated, while the remaining land has to depend upon the monsoons for the supply of water. But the monsoons are uncertain and irregular and all parts of the country do not always get proper rainfall. The consequent lack of water is one of the most important defects of agriculture.

The systems of land tenure which were prevalent until recently do not leave the cultivators with sufficient incentive to improve the cultivation of land. The majority of the actual cultivators are tenants and have to pay high rent to their landlords. Hence they do not feel that they have any stake in land and do not exert themselves to improve cultivation.

The Indian cultivator is no doubt as hard-working as the farmer of any other country. He is also shrewd and intelligent. But he is, as a rule, illiterate, and so he has no knowledge of modern methods of cultivation.

There are also other defects in the agricultural organisation. Finance is the life-blood of every organisation and the supply of finance is inadequate in the rural areas. Cultivators are extremely poor and so are forced to depend on outside sources of finance (mostly money-lenders) for meeting their essential needs. As a result, most of them are heavily involved in debts and cannot afford to spend money for making improvements in land. They have to pay interest at very high rates on these loans, and this eats up a very large slice of their already small

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value of net product being obtained by complicated process of estimation involving many ingenious devices and assumptions for inferring the magnitudes of the unknown from those of the known ; while for the remaining sectors the income method is applied, the number of workers in each category being obtained from the re-organised data on occupational classification.”+

Problems of national income estimation: The National Income Committee have pointed out a large number of pitfalls in framing a satisfactory estimate of national income. Even in advanced industrial countries—with their wealth of statistics, estimators of national income have to face many problems. It is but natural that such problems would be somewhat greater in an under-developed country like India where adequate statistical data are not available on many sections of the economy.

In the first place, unlike the developed countries, a considerable portion of output produced in India does not come into the market being either consumed by producers themselves or bartered for other goods and services. This is specially true in the rural sector. So in determining the amount and value of this part of the total out-put, one has to depend largely on pure guesswork, and this makes the calculations somewhat arbitrary.

Secondly, in Western countries statistics are largely collected from individuals and corporations. But the vast majority of the producers are illiterate, and neither they nor the consumers keep any accounts, or are in a position to keep accounts. Hence they are not able to supply the required data. Hence an element of guesswork therefore inevitably enters into the calculation of the value output, especially in those sectors of the economy which are dominated by the small producers or household enterprises.

Thirdly, even with regard to the available data, they are subject to important limitations. The prices and expenses data for agricultural and related activities are quite complete. Information regarding industries is limited to only a part of those industries in which factory units are important. Data on total and working population were, until recently, incompletely tabulated. Some of the items in the international balance of payments are still rough estimates. There are scarcely any data with regard to agriculture and related activities—no information on the structure of costs or on the savings and consumer expenditure of the rural population.

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The next important reform should deal with the systems of land tenure. The Zemindari system has rightly been abolished and means must be found to establish direct relationship between the cultivators and the government, while providing sufficient incentive to the former to improve their land

Thirdly, we must look to the soil, steps should be taken to prevent the erosion of the soil by means of afforestation etc. Better provisions for irrigation must be made by the construction of irrigation canals, tubewells etc. More manure should be applied to the soil. The Agricultural Departments should conduct research and devise improvements, better qualities of seeds, better control of pests and diseases etc., and find out ways of supplying them to the cultivators at reasonable cost. The government should build up an organisation to distribute seeds among the cultivators, and to familiarise them with the use of better types of implements

Fourthly, another necessity is to improve the organisation for the supply of finance to the cultivators. The best way to do that is by encouraging the co-operative method in various directions. Methods of marketing must also be improved by the elimination of unnecessary middlemen, prevention of fraud and adulteration etc. For this purpose, steps should be taken to organise multipurpose co-operative societies which should look after marketing, supply of good seeds, manures, purchase of cattle and improved implements etc. The present co-operative organisation should be re-vitalised

But the most essential reform is the spread of education in the villages. The education should aim at providing not only knowledge of the three R's, but knowledge of improved methods of cultivation. Only through the spread of education it will be possible to secure modernisation of agricultural technique. It is also essential to take all possible steps to infuse new life into the villages. As the First Five Year Plan notes :—"The peasant's life is not cut into segments in the way the Government's activities are apt to be, the approach to the villager has, therefore, to be a co-ordinated one and has to comprehend his whole life." It will not be enough if only certain economic reforms are brought about in the agricultural organisation. To have a lasting improvement, steps must also be taken to bring about a number of changes in the social and religious life, habits and customs of the rural population.

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CHAPTER 6

AGRICULTURE—A GENERAL SURVEY

Importance of Agriculture: There is hardly any need to stress the importance of agriculture in the economic life of this country. According to the census of 1951, out of a total population of 35.6 crores, 24.9 crores (*i.e.*, 69.9 p.c.) depend mainly on agriculture for their livelihood. About 47 per cent of the total national income of India is derived from agriculture. India is the largest producer of sugarcane, tea and groundnut; the second largest producer of raw jute and rice and occupies the third place in respect of acreage among the wheat-producing countries of the world. Many of the raw materials required by her industries like raw jute, raw cotton etc. are the products of agriculture, and a large percentage of exports consists of agricultural commodities like tea, oil seeds etc. The Planning Commission have therefore, rightly given topmost priority to the development of agriculture. Agriculture is the most basic and vital industry in our country.

Characteristics of Agriculture: Since agriculture is the most basic industry, it is necessary to study its principal characteristics. The first characteristic is that agriculture is carried on mainly on the basis of subsistence farming. In other words, the cultivators till their land mainly to provide the essential requirements of their family. Only the surplus that remains after meeting the family's consumption needs is sold in the market. This is to be contrasted with commercialised agriculture, where the crops are grown mainly for sale in the markets, only a small portion being retained for family consumption. Agriculture in India is mainly "a way of life", to be pursued from generations to generations.

A second characteristic is the progressive sub-division and fragmentation of land. Due to a variety of reasons of which the laws of inheritance and the absence of alternative occupations in the rural areas are the most important, the agricultural holdings are being sub-divided into smaller plots with each passing generation.

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It is not possible because of several factors. The first is the extremely small size of agricultural holdings in India. In order that a tractor can be worked economically, it is necessary to have a plot of land consisting of at least 100 acres. But only a very small number of farms in India is of this size. Secondly, the average cultivator is so poor that he cannot afford to buy modern agricultural equipment which is expensive. Moreover, the conditions of the soil in India are different from those in the western countries, and tractors of the type in use in these countries, are not suitable for our country. Lastly, the wide use of machinery in cultivation has been made possible in the western countries because of the extension of electricity to the rural areas, the manufacture of machines suitable to farms in varying conditions of climate and geographical factors, and the spread of technical and rural engineering instruction to the villages. Almost all these factors are absent in our country. Electricity has been brought to only a few villages. The villages do not also possess good repairing organisations without which the extensive use of machines will be impossible. There is also a lack of technical personnel to repair these machines in the villages.

Thus while the possibility of a rapid mechanisation of agriculture is extremely doubtful, its desirability is also not obvious. Mechanisation, if carried on at a rapid pace, will throw large numbers of the rural workers out of employment. Already the incidence of unemployment and under-employment is very high in our agricultural organisation. Mechanisation will, therefore, give rise to serious problems.

There are also many other difficulties in the way of rapid mechanisation. The small size of holdings, the innumerable tenurial patterns, the poverty and illiteracy of the cultivators,—these will certainly limit the pace of mechanisation. But the need for the wide use of machines cannot be denied, especially for the reclamation and cultivation of large areas of waste lands. In all other countries mechanisation has been regarded as a boon to society. It has increased the yield from land and ensured higher wages for labour, and higher incomes for the farmers who have thus been enabled to lead a happy farm life with increased leisure.

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Not only is the average yield extremely low as compared to that of other countries, but a matter for serious consideration is that, according to the official estimates, during the 15 years between 1936 and 1951, there has taken place a decline in the average yield per acre in respect to the principal crops.

Average yield per acre (in pounds)

	1951	1936
Rice	809	632
Wheat	629	556
Sugar-cane	3,046	2,794

Low Productivity in Agriculture: One of the most distressing facts about Indian agriculture is the extremely low yield per acre. The average yield per acre of almost all crops is lower in India than in any other advanced country of the world. What are the causes of such low productivity? In other words, what are the main defects in the agricultural organisation of India? The main defects in Indian agriculture are the small size of the farms, primitive methods of cultivation, lack of water and manure, use of inferior seeds and ancient implements, and the defective system of land tenure.

The average size of farms in India is very small and is getting smaller with the passing of generations. While the average size of an agricultural farm is only acres in India, it is 145 acres in the U.S.A., and about 40 acres in Denmark. The small size is due to the growing pressure of population and to the lack of any alternative sources of occupation for the rural people. This is a fundamental defect in our agricultural organisation. When the farms are of such a small size, it will not be possible for the cultivators to use modern appliances.

A second defect is the prevalence of primitive methods of cultivation. The cultivators are still using the ancient plough, which merely scratches the surface. The use of agricultural machineries like tractors etc., which have led to a vast increase in productivity is practically unknown in our country. The cultivators, being most illiterate, know nothing of the scientific methods of cultivation; and being extremely poor, they cannot afford to buy these machineries even if they come to know of them. On account of their ignorance and poverty, the cultivators

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CHAPTER 7

THE SIZE OF HOLDINGS

One of the most important causes of the low agricultural productivity in our country is the extremely small size of the unit of cultivation. The problem is of two-fold character. First, the size of a holding (i.e., the area cultivated by a person or a family) is small. Secondly even these small holdings are seldom found in one compact bloc, they are scattered all over the village in still smaller plots. The first is the problem of sub-division of holdings, the second is known as fragmentation of holdings.

Sub-division of holdings: There is no doubt about the fact that in India the unit of cultivation is probably the smallest in the world, and it is getting smaller with each passing generation. According to the figures published in the First Five Year Plan, the vast majority of the holdings is on the average less than 5 acres. Holdings containing upto five acres of land constitute 83.3 p.c. of the total holdings in Bihar, 81.2 p.c. in the U.P., 74 p.c. in Orissa, 66.1 p.c. in Assam and 52.3 p.c. in Bombay. In Madras, holdings assessed upto Rs. 10 or less constitute 82.2 p.c. of the total holdings. In the Punjab, an enquiry conducted by the Punjab Board of Economic Enquiry showed that the number of holdings below 3 acres increased from 43.4 p.c. of the total holdings in 1928 to 48.8 p.c. in 1939.

The average size is thus very small as compared to the averages in other countries. For example, in other countries, the average size of holdings is about 27 acres in the U.K., 15.5 acres in France and 140 acres in the U.S.A.

Fragmentation of holdings: A greater evil than sub-division is the growing fragmentation of holdings. Not only is the average size of holdings very small, but even this small unit of holding is not situated in one compact bloc. Most of these holdings have further been divided into small plots which lie scattered in different parts of a village or in different villages. It has been found in a Punjab village that the land has been divided into 1898 fields averaging one-fifth of an acre. In another village 12800 acres have been found scattered in 63000 fields. The average size of plots was found to vary between .28 acres and .81

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produce to the latter at reduced prices. Or they have to sell in the market immediately after the harvest when the prices of crops are usually the lowest, in order to meet the demand of the mahajans for repayment. The marketing organisation is also defective in many respects. There is a long chain of middlemen and dealers between the cultivator and the final consumer, and they take away a considerable percentage of the price of the crops. Out of every rupee paid by the consumers, the cultivator usually receive about 8 to 9 annas, the rest being pocketed by those middle man.

Lastly, there is an absence of suitable alternative sources of occupation for the cultivators. It is well-known that agriculture is a seasonal occupation, occupying the time of the cultivators for 4 to 6 months. For the rest of the year they have to remain idle. In old days they spent their spare time in carrying on one or other of the cottage industries. But most of these industries are in a decaying condition.

Remedies for the defects of Agriculture : The outstanding fact about Indian agriculture is the extremely low yield from land. Not only is the yield low, but there is the evidence that it has increased to any significant extent over the last decades. On the other hand, the population of the country has been increasing by large numbers. So unless steps are taken to increase the yield, India would have to face great difficulties in supporting the huge population.

The low yield is due to a variety of factors, *e.g.*, the uneconomic size of the holdings ; inadequate supply of water, primitive methods of cultivation, lack of capital leading to the inability to use good seeds or manures, defective marketing organisation, ignorance and ill health of the cultivators and defective systems of land tenure etc. The remedies must seek to remove those defects.

First of all, steps should be taken to increase the size of holdings, either by the method of compulsory reconstitution of holdings, or by the adaptation of co-operative farming or on the Soviet model of collective farming. As these steps might result in unemployment among the agriculturists, new employment must be found for them either in the villages by the development of cottage or small-scale industries, or in the towns by the establishment of industries.

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village, or to have plots of land of differing soil conditions. This is an advantage as it reduces for each farmer the risks and uncertainties of cultivation.

Causes of sub-division and fragmentation: The main causes of sub-division of holdings are the growing pressure of population on land and the difficulty of providing alternative occupations. As is well-known, the population of India has been growing at the rate of more than one per cent per year over the last 50 years. But the area under cultivation has not increased proportionately. On the other hand, the village industries declined one by one, while employment in modern, large-scale industries increased at a very slow rate. As a result, the growing population had to fall back on the land for their livelihood. These tendencies have been accentuated by the laws of succession which provided for the equal division of the property among all the heirs. So long as the joint family system was prevalent, the brothers cultivated the plots jointly, and the problem thus did not grow acute. But with the decline of the joint family system, cultivation is no longer carried on jointly, and this has increased the magnitude of the problem. Fragmentation of holdings is due primarily to a desire to secure equal shares for all heirs. If the father died, leaving two sons and two plots of land of unequal fertility, the sons got shares in each plot of land.

Remedies: The remedies that have been proposed or attempted can be classified into five groups, viz., consolidation of holdings, reconstitution of plots into economic holdings, collective farms, co-operative farming and co-operative village management.

(1) **Consolidation of holdings:*** Some attempts have been made in this country to secure consolidation of holdings by various methods. This has been done in three different ways. First, it was sought to consolidate the small, scattered plots into bigger units by voluntary methods. The government officers tried to persuade the cultivators to agree to consolidate their holdings by the offer of some concessions. To facilitate such transactions, the Baroda Government passed an Act in 1920. In the Punjab,

*For a summary of legislation on this subject, see *Agricultural Legislation in India*. Vol. II (Ministry of Agriculture, Government of India)

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The question of mechanisation in Agriculture: The need for increased agricultural output is admitted on all hands. A number of writers have, therefore, expressed their opinion that steps should be taken to mechanise agriculture in our country. It is well-known that in the western countries, the introduction of various types of machines like tractors, has increased the yield of crops from land enormously. If such machines are adopted by our cultivators, the output of crops per acre will improve by a large percentage. Moreover, certain parts of land classified as "culturable waste" can be brought under cultivation by the use of tractors and other machines.

The use of machines in agricultural operations has made notable progress in many of the western countries. In France and Denmark farms use many kinds of agricultural machinery including the harvest-binders and reapers which can be found extensively even in small farms. In the wheat-growing areas of the U.S.A., almost all farms use tractors and other implements. In the U.S.S.R. the government have encouraged and forced the adoption of mechanised cultivation on an unprecedented scale both before and after the second world war. There is no doubt that the result of such mechanisation in agriculture has been beneficial. It has enabled the cultivators of these countries to produce more, and to enjoy a high standard of life on the farm with more leisure.

Attempts have already been made in India to introduce machines in the cultivation of land. Following the recommendation of the Food Grains Policy Committee, steps have been taken to bring culturable waste land under cultivation with the use of tractors in the U.P., M.P. the Punjab, Madras and Bombay. The Government of India obtained about 300 surplus tractors from the U.S.A. stores after the second world war and with these as nucleus, a Central Tractor Organisation of the Ministry of Food and Agriculture has been set up. Considerable areas of waste land have been reclaimed with the use of these tractors in Khurai in the M.P., Ganga Khadar, Nainital Tarai and Jhansi in the U.P., and in the districts of Hissar, Rohtak, Ludhiana, Jullundur, and Ambala in the Punjab.

The desirability of mechanisation in agriculture has been questioned by a large number of writers. Such mechanisation, it has been urged, is neither possible nor desirable in our country.

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UP, the Zemindari Abolition placed restrictions on future partition of holdings

It is too early to judge the results of these legislations. Upto the time of writing, their working has barely touched the fringe of the problem. It is to be hoped that with the abolition of the zemindari system, the consequent simplification of land tenures, and the adoption of various measures of land reform, the problem of consolidation is likely to become easier.

(2) **Economic holdings:** A proposal, popular with many economists, is the reconstitution of the scattered holdings into what is called "economic holdings". An economic holding consists of that area of land, the cultivation of which enables a family of farmers to enjoy a reasonable standard of living without help from outside sources. It is quite obvious that the size of such holdings would vary in different localities according to the character of the soil, rainfall, facilities for irrigation etc. Estimates of the size of an economic holding vary from 4 to 6 acres to 40 acres of land. The UP Zemindari Abolition Committee of 1916 thought that an economic holding should consist of 10 acres, while the Agrarian Reforms Commission of Saurashtra of 1951 expressed its opinion in favour of an area varying between 25 to 40 acres. The Congress Agrarian Reforms Committee, while correctly defining an economic holding, held, however, that in our country holdings of a smaller size (ie, smaller than the size of an economic holding) should be the ideal on sociological grounds. Such holdings have been called basic holdings.

This method proceeds to solve the problem in the following way. First, an enquiry should be held in different localities to determine the size of an economic or basic holding. After this is done, attempts are to be made to reconstitute all holdings on the basis of economic holdings by persuasion or compulsion. The law should also prohibit any sub-division of such holdings.

Nothing substantial has been done with regard to the operation of this proposal. The Bombay Prevention of Fragmentation and Consolidation Act of 1947 contains provisions under which the State Government has the power to fix and determine, in relation to any local area and the class of land, the size of holdings that can be cultivated profitably as a separate plot. This extent of land is to be called a "Standard area". Any part of the land below this area is defined as a fragment. Any transfer

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The principal difficulty experienced in organising these societies is that the farmers do not readily respond to co-operative effort. Cultivators have been found to be lacking the spirit of self-help, mutual trust and leadership which is essential for the effective working of these societies. Hence it is being increasingly felt that some degree of compulsion may be necessary to pool the land and ensure cultivation by co-operative methods. That has been the opinion of the Congress Agrarian Reforms Committee.

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Evils of sub-division and fragmentation : The small size of the unit of cultivation in India is possibly the biggest single factor causing low productivity. First, the small size has meant small output, higher costs and lower money incomes. It makes the use of machineries and other labour saving devices unprofitable. It creates difficulties for irrigating the plots. The small size of the holdings and the scattered position of the plots make it uneconomic for the cultivator to sink a well. It may not be within the financial capacity of the cultivators. Moreover, it may prove difficult for the cultivators to watch the crops on the scattered plots, and they may find it impossible to pay proper and timely attention to all plots of land situated in different parts of the village. Secondly, sub-division and fragmentation of holdings also involve a huge waste of land, time and energy. Large areas of land are lost in boundary lines and hedges. Much time is also lost in going from one plot of land to another. They are a fruitful source of enmity and litigation between neighbours who accuse each other of encroaching upon their own plots of land, or who may dispute each other's rights of passage over the plots of land. Thirdly, as the plots are small and scattered, it is not possible for their owners to build hedges round each plot or to fence them properly. So the crops growing on these plots cannot be effectively protected against the ravages of unwanted cattle and other animals. Lastly, the small size of holdings means that their owners can furnish only small security. So they have to pay high rates of interest when they borrow. The burden of interest payments has, as a consequence, grown very heavy. Thus sub-division and fragmentation have checked improvement, resulted in considerable wastage of human, animal and material resources, increased the cost of production and have even thrown some plots of land out of cultivation in many areas. As the plots grow smaller and smaller in size, it may no longer be profitable to cultivate some of them. When the plots are scattered, the cultivator may not find the time to cultivate all of them.

It should, however, be mentioned that there are some writers who find some merits in the fragmentation of holdings. According to them, the system of fragmentation enables a large number of cultivators to have a share of the more fertile land in the

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CHAPTER 8

IRRIGATION

Importance of irrigation: The importance of proper provision of irrigation facilities is quite obvious in an agricultural country like India. Land does not usually yield good crops unless it gets a plentiful supply of water. This is specially true in India where the soil is comparatively dry. Land can be given adequate quantities of water from two sources viz., rainfall and artificial irrigation. Though India belongs to the monsoon area, rainfall is insufficient in many parts of the country. In those areas where it is adequate, difficulties are caused by the uncertainties of the rainfall. There are certain types of crops like rice or sugarcane which need a regular and steady supply of water, hence it has become essential to construct irrigation works in order to lessen our dependence on the monsoons.

Kinds of irrigation works: There are four main sources of irrigation works in India, viz., wells, tube-wells, tanks and canals.

Wells These constitute an important source of supply of water, important because their construction is within the resources of the individual cultivators. This form of irrigation has been highly developed in the U.P., the Punjab, Madras and Bombay. There are about 2½ million wells in the country in which about Rs 100 crores have been invested. These have been constructed mostly by the cultivators to many of whom the government granted takavi loans, temporary exemption from the payment of higher rent etc.

Tube-wells This source is being utilised only recently and has been developed extensively in the U.P. The Ganges Valley Tube-well Irrigation scheme of that state made provision for the construction of 1700 tube-wells, which are pumped by electricity. Since then a large number of tube-wells have also been sunk in the U.P., the Punjab, Bihar and other states.

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By 1950, about 2¼ million acres in the Punjab, 75,000 acres in the U.P., and half a million acres in Madhya Pradesh have been consolidated. In Bombay, a total area of 6½ million acres has been consolidated. While co-operative consolidation has thus made some progress, it was felt that the pace of consolidation under the voluntary method was bound to be very slow. Hence the different states sought to introduce some element of compulsion for hastening the work of consolidation. This element of compulsion was introduced in two stages. In the first stage, the initiative in consolidation came from the local people. If a majority or a certain percentage of the owners or cultivators agreed to accept the scheme, the minority was to be forced by law to accept it. The C.P. Consolidation of Holdings Act of 1928 was of this type. Under that Act, if not less than one-half of the permanent holders, holding not less than two-thirds of the cultivated area agreed to accept a scheme of consolidation, it would be binding on all holders. The Punjab and the U.P. Governments also passed similar legislation. Though some actions had been undertaken under these Acts, the results have not been satisfactory. They were applied very cautiously and as the initiative in consolidation was to come from the people, progress was also slow.

In the third stage, the element of compulsion was further increased. The initiative in framing a scheme of consolidation is to be taken by the State Government, which can enforce the scheme on all holders, irrespective of their consent. The Bombay Prevention of Fragmentation and Consolidation of Holdings Act of 1947 authorised the government to frame and enforce a scheme of consolidation in a particular area. A similar Act has also been passed in the Punjab in 1948, under which consolidation proceedings can be started either by the government on its own initiative, or on the application of the owners of land. The U.P. Government has also passed a similar Act, the U.P. Consolidation of Holdings Act in 1953. Recent legislation has also sought to incorporate measures to prevent the future recurrence of subdivision and fragmentation. Both the Bombay and the Punjab Acts, cited above, contain provisions to that effect and in the

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U P	39 02	11 20	28 9
W Bengal	11 62	1 90	16 3
Hyderabad	22 32	1 32	5 9
Kashmir	1 03	66	64 1
Madhya			
Bharat	8 95	39	4 3
Mysore	6 45	1 15	17 8
Pepsu	4 38	1 95	44 5
Rajasthan	8 38	1 50	17 8
Saurashtra	1 01	005	04
Travancore- Cochin	2 82	94	33 3

Classification of irrigation works. Irrigation works are now classified by the government into two groups, viz., productive and unproductive. Productive works are those projects which are expected to yield a net revenue sufficient to cover the interest on the capital invested within a few years. Unproductive works are not expected to yield the required revenue.

Benefits of irrigation: Irrigation works confer very great benefits on the country. In the first place, land, which is irrigated properly, generally yields larger crops than unirrigated land. As the amount of rainfall is uncertain as well as inadequate, the yield from unirrigated land is also uncertain, whereas that from irrigated land is more certain. Thus irrigation is an important means of stabilising agriculture in areas of precarious rainfall. Secondly, considerable part of the land at present lying waste can be brought under cultivation if irrigation facilities are provided. Thirdly, irrigation works, by ensuring a steady supply of water, provide good protection against the ravages of famine. Lastly, irrigation works yield some revenue to the states in addition to improving agriculture.

Irrigation in the five-year-plan: After the achievement of independence in 1947, the Government of India realised the need for constructing more irrigation works in the country in

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There are two great difficulties in regard to this proposal. First, the determination of an economic holding in different localities will not be an easy or inexpensive task in view of the extremely divergent conditions prevailing in the country. Secondly, reconstitution of existing holdings into economic holdings would result in throwing a large number of people out of land. It will create huge rural unemployment and the consequent social disorganisation.

(3) **Collective Farming:** One way to solve the problem may be to follow the Russian model, and form collective farms by abolishing private ownership in land. That collective farms have increased the productivity of Soviet agriculture may be readily admitted. But the adoption of this proposal would be unjust only with regard to land, if at the same time, other forms of property are left under private ownership. Unless private property is abolished, everywhere the proposal is not likely to find acceptance in the country.

(4) **Co-operative Farming:** Under this system, the cultivators and the owners of the different plots in a village or villages form a co-operative farming society. They pool all their land together, cultivate it jointly and then divide the produce according to some pre-arranged basis. The main advantage of this method is that while nobody is dispossessed from land, farming can be undertaken on a large-scale. Such co-operative farming provides the best solution for the problems of subdivision and fragmentation. Co-operative farming may be of four different types, co-operative joint-farming, co-operative tenant farming, co-operative better farming and co-operative collective farming. *A co-operative joint farming society is formed by a number of small owners.* The plots owned by them are pooled into one unit. Cultivation and management are carried on jointly by all members, who retain ownership over their plots. The members are paid for their work and any profits are distributed among them. *A co-operative tenant farming society does not undertake cultivation.* It divides the land, it owns into blocks which are then let out to cultivators for rent. These cultivators enjoy certain privileges regarding seed, implements, manures etc., from the society, and have to cultivate the land according to

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CHAPTER 9

FINANCING OF AGRICULTURE

All undertakings depend upon finance. Agriculture is no exception to this rule. Its need for finance is no less urgent than that of a large-scale industrial unit. The cultivator needs finance to meet his current requirements, such as for buying seeds, manures, feeding staff etc. He must have money to buy land or to carry out necessary improvements to his land like the construction of wells, fences, drainage, reclamation and other long-term purposes. While his necessity is no less urgent, his difficulties are greater than those faced by his industrial brother. His unit of production is usually small, and his income is highly uncertain, being at the mercy of the monsoons and the nature. The sources for the supply of finance are also much less organised or adequate than those in the case of the industrialists. The problem is very much complicated in India on account of the existence of large indebtedness among the peasants. Lack of adequate finance is, therefore, one of the most important causes of low agricultural productivity. In this chapter we propose to study the problem of the supply of short-term finance to meet current requirements.

(a) *Existing agencies of finance* : The cultivator, like all businessmen, may finance his operations by drawing upon his own resources. But it is well-known that the vast majority of the cultivators do not possess enough resources for this purpose. Hence they have to depend on outside sources for the supply of necessary finance and have to borrow. The total amount of short-term finance required by the cultivators has been variously estimated. In 1951 the Reserve Bank of India estimated the total short-term and medium-term capital needed in agriculture to be Rs 500 crores. This estimate was made on the basis of the fact that in Bombay the average short-term loan issued by the co-operative societies to an agriculturist family was Rs 100. The Grow More Food Enquiry Committee of 1952 estimated the total annual requirements at Rs 800 crores, on the assumption that the needs for annual agricultural operation for an acre of wet land was Rs 60 and of dry land Rs 20. The principal sources from which they may borrow are (1) the

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to evolve a joint organisation of both the owners and the tillers of land which shall supervise the cultivation of the land. All plots are to be cultivated jointly and the crops raised on all land are to be divided among the owners in the form of ownership dividends and the actual cultivators. The managing body of this organisation is to consist of the representatives of all the families in the village. Its main function will be to divide the work of cultivation among the working members and to distribute dividends.

Such an organisation may be utilised to carry out an all-round improvement in the social and economic life of the village. It may be organised on the co-operative basis, or merely as a joint body of the villagers. There is no doubt that this has great possibilities. But there has to be a great deal of trial and experiment before the most suitable pattern of such an organisation may be evolved. There is no doubt that something along these lines, or on the pattern of co-operative joint farming is to be preferred to the method of forced consolidation of holdings. There are obvious disadvantages in the latter method of converting small plots into large holdings. It would result in the conversion of owners of tenants of land into hired workers on large farms. Self-employment and rural unemployment will appear undisguisedly as an absolute lack of work and income. One should, as Dr. Datta has warned us, "remember the results of the enclosure movement in Britain which created a surplus population of 'semi-employed, inefficient labour' troubling the government and local authorities for many decades"* before coming to a final decision on the proper solution of this problem.

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1930, to pass laws for controlling and regulating the activities of the money-lenders

The following table *gives some rough idea of the extent of the operation of the money-lenders

State	No of money-lenders registered or licensed	Amount lent Rs in crores
Bihar	29,684	15.89
Bombay	25,229	9.44
Madhya Pradesh	9,196	Not available
Punjab	276	"
Hyderabad	15,875	"
Mysore	349	"

In addition, the larger land-holders who cultivate their own lands can find from their own resources the short-term finances needed by them

(2) *Indigenous bankers* These do not undertake the function of supplying funds directly to the cultivators. Their part is mainly indirect. They finance the movement of crops from the villages to the main marketing centres and the ports. The village money-lenders also borrow funds from them for the purpose of lending to the cultivators.

(3) *Co-operative Societies* The co-operative credit societies have been organised in the 20th century mainly under the auspices of the government. These are formed by the cultivators themselves who organise the society to raise funds and to lend them to members. These primary credit societies sell shares, accept deposits and borrow funds from the central co-operative banks located in district or taluka headquarters. The money thus obtained is lent to the members to meet their current requirements. There were 116,534 co-operative credit societies in 1949-50, supplying funds to the agriculturists, with more than 48 lakh members and Rs 35.21 crores of working capital. As the amount of new loans granted by these societies

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are mostly constructed by private persons, tanks are almost always owned by the government.

Canals : By far the largest part of the irrigated area gets its water-supply from the canals. They are also an ancient source of irrigation, having been constructed both in Hindu and Muslim periods. These canals have been constructed mostly by the state.

They are of three types, viz., perennial, inundation and storage. The *perennial type of canals* contains a steady supply of water throughout the year. This is done by constructing a barrage across the river in such a way as to maintain the river water at a sufficiently high level so that there is always a steady supply of water in the canals. *Inundation canals* receive water from the river only when it rises above a certain level. Hence these canals contain water only during particular seasons of the year. In the *storage canals*, rain-water is stored up during the monsoons in huge reservoirs by constructing dams across the mountain valleys. This water is then used to irrigate the surrounding areas in the dry part of the year. This type of canals is to be found mostly in Madras, Madhya Pradesh and Madhya Bharat. Of the total irrigation area, about 30 p.c. is irrigated by wells ; 21.6 p.c. by tanks and 48.4 p.c. by canals.

Extent of irrigated area : In undivided India about 24 p.c. of the total acreage was irrigated. After partition, the proportion of irrigated to the cultivated area has fallen to only 19 p.c., out of a total cultivated area of 25 m. acres, only 48 m. acres of land are now irrigated.

The extent of irrigated area also varies in different states, as will evident from the following table. The figures relate to the year 1948-49.

Table

State	Net area actually sown	(In million acres) area irrigated	Percentage of net areas sown
Assam	5.37	1.14	21.2
Bihar	17.64	4.92	27.8
Bombay	33.26	1.57	4.7
Madhya Pd.	28.57	1.73	6.0
Madras	30.93	9.81	32.0

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Reserve Bank of India and rural credit*. When the Reserve Bank of India was established in 1934, it was expected to take part in the provision of rural finance. For that purpose, certain provisions were included in the constitution of the Reserve Bank. First, it was required to set up an Agricultural Credit Department to study the problem of rural finance and to make suitable recommendations to solve this problem. Secondly, the Reserve Bank was required, under section 17, to grant loans and advances to the co-operative banks through their apex institutions (i.e. state co-operative banks) for financing seasonal agricultural operations or the marketing of crops. The Bank was also to grant loans and advances to the state co-operative banks against government securities and land mortgage bank debentures. Lastly, the Reserve Bank was to grant loans or advances to the state co-operative banks against their promissory notes, supported by documents of title to goods. The period for which loans are to be granted for seasonal agricultural operations or marketing of crops was 9 months against 3 months in the case of ordinary loans. By another amendment, this period has been extended to 15 months†. In spite of these provisions, the part played by the Reserve Bank in granting loans and advances to the co-operative movement was comparatively small, as would be evident from the fact that in 1946-47, the amount of such loans was only 15 lakhs. Since 1942, the Reserve Bank announced that it would grant such loans at one (later raised to one and a half) per cent below the Bank Rate, i.e. at $1\frac{1}{2}$ p.c., the Bank Rate remaining at 3 p.c. throughout this period. In other words, while other borrowers from the Reserve Bank had to pay 3 p.c. on their loans, the state co-operative banks paid only $1\frac{1}{2}$ p.c. But since 1947, the Reserve Bank has been playing an increasing part in the provision of rural finance. The amount of loans granted by it to the state co-operative banks increased from Rs 168 lakhs in 1947-48 to Rs 537 crores in 1951-52 and Rs 125 crores during 1951-52.

*See The Role of the Reserve Bank of India in the Scheme of Agricultural Credit by V. Sivaraman in the *Reserve Bank of India Bulletin*, April, 1952, P. 269—75.

†By a recent amendment passed in 1953, the Reserve Bank has been authorised to grant loans for agricultural purposes for periods ranging for more than 15 months but not exceeding 5 years subject to a government guarantee of such advances. The total of such advances must not exceed Rs 5 crores.

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order to increase the production of food crops. A large number of irrigation works were started in different states. These works can be classified into two groups :—multi-purpose projects and other irrigation works. The multi-purpose projects are so called because they are meant to serve many purposes, viz, irrigation, generation of electricity, flood-control etc. Among these projects, mention has already been made of the Damodar Valley Project, the Hirakund Dam Project, Bhakra and Nangal Project etc.

The Five-Year-Plan rightly gives emphasis to the need for more irrigation works. It has, therefore, made provisions for the expenditure of Rs. 266 crores on the various multi-purpose and power projects and Rs. 168 crores on the construction of other irrigation works. The aim is to complete the projects which have already been started and it has been estimated that when these projects are completed and fully developed, they will irrigate an additional area of 16.9 million acres of land and will generate 1.46 million kwt. of electricity. In addition to those already begun, some new schemes will also be started. These are the Koshi Project in Behar and Nepal, which is expected to irrigate about 2620,000 acres and to generate 40,000 kwts. of electricity and is also to help in flood control; Rihand Project in the U. P., irrigating 35,000,000 acres and generating 240,000 kwts.; Koyna Project in Bombay, irrigating 33,00,000 acres; Krishna Project in Madras and Hyderabad and the Chambal Project in Madhya Bharat and Rajasthan.

QUESTIONS

1. Describe the various systems of irrigation in India, and point out their economic significance. (Ag. 1938 ; Cal. 1937 ; Del. 1932 ; Panj. 1939).
2. Briefly describe the principal irrigation and hydro-electric works undertaken in India since 1947 and point out their economic consequences. (Panj. 1953).
3. What do you know of the Damodar Valley Project ? Estimate the effects it will produce on the wealth and welfare of West Bengal. (Del. 1953 ; Cal. 1949).
4. Describe the principal river valley projects in India. Point out their influence on Indian agriculture and industries.. (Ag. 1953).

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Finance Corporation in 1952 for providing financial facilities to agriculture. This corporation has an authorised share capital of Rs 5 crores of which Rs 2 crores have been issued initially 51 p.c. of the shares has been taken up by central government and the rest were taken up by the state governments, banks and other financial bodies.

But the desirability of establishing such an institution may be questioned. The corporation, when set up, cannot lend directly to the cultivators, the vast majority of whom are not in a position to furnish adequate securities. It will have to lend through the co-operative banks. But unless it can be shown definitely that the co-operative institutions cannot borrow the necessary amount from the Reserve Bank, there is very little justification for setting up such a central lending institution for agriculture.

There is no doubt that the only way to solve the problem of rural finance is through the reform of the business of the money-lenders and of the co-operative movement. Suitable legislation has been passed for securing necessary reforms in the operations of the money-lenders. A detailed examination of these steps will be made in the next section.

B The Problem of Agricultural Indebtedness. Another most unsatisfactory feature in our agricultural organisation is the existence of large indebtedness of the cultivators. That the farmers have always to borrow is not peculiar to India. This is true of every country. But in India the problem has become acute on account of the chronic poverty of the cultivators and the unproductive character of the most of the debts contracted by them.

Various estimates have been made from time to time regarding the extent of agricultural indebtedness in our country. In 1895, Sir F. Nicholson estimated the total rural debts to amount to Rs 45 crores in Madras. On the basis of the same estimate, Sir E. Maclagan calculated the total rural debts of British India to be Rs 300 crores. Sir M. L. Darling made the next estimate. According to his calculations, the total agricultural debts in the Punjab amounted to Rs 90 crores, averaging Rs 76 per agriculturist, and the total debts in British India was not less than Rs 600 crores. The Central Banking Enquiry Committee estimated the total indebtedness to be Rs. 900 crores.

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(1) *Moneylenders* : They are the most important sources of supply of finance to the cultivators. We have unfortunately no statistics of the total amount of funds supplied by these people. But there is no doubt that they supply the bulk of rural finance. The majority of these money-lenders generally combine this business with some form of trading, acting either as merchants or as commission agents. Quite a number of landlords and the large holders acted as money-lenders. Their methods of business are prompt and elastic and they give spot finance. The borrower approaches them direct, and is not bothered by many formalities. The local knowledge and experience possessed by these money-lenders and their presence on the spot enable them to lend to borrowers who are not always in a position to provide tangible assets.

Unfortunately the finance supplied by the money-lenders has not always been a blessing. In the first place, the ease and facility of borrowing have resulted in improvidence and extravagant habits. Secondly, money-lenders charge very high rates of interest on their loans. It has been found that the rates of interest charged by money-lenders varied between 9 to 36 per cent in Bombay. In the M. P., 25 per cent was the usual rate. Part of this high interest rate is, of course, intended to cover the risk of loss as the majority of borrowers are not punctual in repaying loans and cannot afford to furnish good securities. But such high rates have been one of the most important causes of growing indebtedness, and impoverishment of the cultivators. Lastly, quite a large number of money-lenders have been dishonest, and have not hesitated to take recourse to unfair practices to exploit the borrowers. They do not follow any regular system of accounting; do not give regular receipts for money received and often take bonds for higher amounts than the sums lent. If they are also a merchant or a commission agent, they force the borrowers to sell the produce to them at low prices.

As everybody recognised that in spite of these malpractices it would not be possible for us to dispense with their services for a long time to come, attempts have been made, especially since

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Lastly, in the pre-British days, there was some check on the activities of the money-lenders. The village community looked after the interests of the borrowers. Further, on account of the rule of *Damdaput* money-lenders could not demand more than double the original sum they lent. This put an automatic check on the growth of debts. Lastly, it was then not so easy to sell land and the money-lender had therefore to depend on the goodwill of the borrowers for getting his money back. But during the British rule with the disintegration of the village communities, the rule of *Damdaput* became a dead letter and the burden of debts amounted higher and higher. The civil law favoured money-lenders who could bring suits for the recovery of loans and could attach the lands of the borrowers in case of a failure to repay loans.

Effects of indebtedness: The results of such heavy indebtedness have been extremely undesirable. Once in debt, always in debt. The cultivators, who often borrowed injudiciously for unproductive purposes, soon found themselves dispossessed of their land. As a result, the number of landless labourers increased, giving rise to discontent. In many cases, money-lenders, after buying the land, settled it with the borrowers who become tenants, paying higher rent. They lost all incentive to improve cultivation. The result was a loss in productive efficiency. As many money-lenders also combined their business with some trading operations, they often forced the borrowers to mortgage their standing crops to them. These crops, when harvested, had to be sold to the money-lenders at prices dictated or fixed by the latter. So the cultivators could not get proper prices even for the small amount of crops grown on their tiny plots of land. There is no doubt that such heavy indebtedness stands in the way of agricultural improvement.

Measures for Relief: The problem attracted the attention of the government in the latter part of the 19th century. Since then, a number of measures have been adopted to bring relief to the cultivators. In the first place, the government sought to amend the law in order to prevent some malpractices. For example, the Deccan Agriculturist's Relief Act of 1879 allowed the civil courts to reduce the rates of interest. Creditors were obliged to furnish written accounts and to give proper receipts for all repayments.

Lastly, in the pre-British days, there was some check on the activities of the money-lenders. The village community looked after the interests of the borrowers. Further, on account of the rule of *Damdaput* money-lenders could not demand more than double the original sum they lent. This put an automatic check on the growth of debts. Lastly, it was then not so easy to sell land and the money-lender had therefore to depend on the goodwill of the borrowers for getting his money back. But during the British rule with the disintegration of the village communities, the rule of *Damdaput* became a dead letter and the burden of debts amounted higher and higher. The civil law favoured money-lenders who could bring suits for the recovery of loans and could attach the lands of the borrowers in case of a failure to repay loans.

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(5) *The Government.* The governments of the states have also taken some part in meeting the financial needs of the cultivators. They grant two types of loans, short-term loans granted for the purchase of seeds, manure, cattle etc, under the Agriculturist's Loans Act of 1884, and relatively long-term loans financing permanent improvements in land under the Land Improvement Loans Act of 1883. These loans are called *taccavi* loans. The amount of these loans is very small as compared to the total needs of the cultivators. They are generally granted during periods of distress or crop failures. They are, therefore, an emergency source of credit, rather than a regular one on which cultivators may depend. Too many formalities have to be followed in getting those loans, which can be obtained after a good deal of delay. The method of collection is also very rigid. The cultivators have to pay back on the due date, as otherwise distress warrants may be issued against their properties. As a result, these loans have never been popular with the cultivators.

Thus it is obvious that the bulk of rural finance is still now supplied by money-lenders under conditions which operate heavily against the cultivators. Co-operation has touched only the fringe of the problem, and the government comes in only occasionally, specially during periods of distress. This is the over-all picture of the organisation of rural credit in our country. The picture will, however, be incomplete unless one mentions the part played by the Reserve Bank of India in this regard. The Reserve Bank does not provide finance directly to the cultivators. Its role is mainly indirect. It has been granting increasingly large amounts of loans to the co-operative banks. The Reserve Bank granted loans worth Rs. 12.80 crores to the state co-operative banks at a concessional rate of $1\frac{1}{2}$ per cent, the amount being nearly double of that granted in the previous year.

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a result of which the burden of debts grew heavily. The different state governments were forced to adopt a series of measures to cope with the problem of indebtedness. These measures can be divided into two classes, viz., scaling down debts and reform of money-lending. We propose to discuss them one by one.

Scaling down debts: Almost all the states including the previous Native States have passed suitable legislation for the conciliation and reduction of debts. Most of these Acts have been passed during the years 1933 to 1939. Conciliation of debts was first carried out in the Madhya Pradesh in 1933. Under this method, the government established a large number of Debt Conciliation or Debt Settlement Boards in different areas of the state. These Boards hear petitions submitted by borrowers and serve a notice to the creditors requiring them to submit detailed accounts of debts owed by borrowers. They then try to induce creditors to agree to accept, in settlement of their loans, sums within the paying capacity of debtors. They might also fix instalments ranging over a period of 15 to 20 years for the repayment of debts.

At first, these settlements were made on a voluntary basis. But soon it was found necessary to introduce a measure of compulsion. In some Acts, it was, therefore, laid down that if creditors to whom 40 p.c. of the debts of a borrower (in Madras 50 p.c.) were owed and agreed to accept a settlement proposed by the Board, it was to be decreed as binding upon other creditors. If some of them refuse to accept the settlement, they were placed under certain restrictions. For example, they would not be paid costs of a suit brought for the recovery of the debts; they would not be paid interest at more than 6 p.c. and their loans were to be repaid only after the claims of the creditors who agreed to the settlement were met in full. In Madhya Pradesh, Debt Relief Courts were granted authority to reduce the principal of debts in proportion to the estimated fall in the value of land. The Madras Agriculturist's Relief Act of 1938 laid it down that all arrears of interest outstanding on oct., 1937 were to be wiped out, and only the principal was to be repaid. In future, interest could be charged at the maximum rate of $6\frac{1}{4}$ p.c., and the total liability was not to exceed double the amount borrowed.

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This had been made possible as a result of a number of concessions granted by the Reserve Bank. For example, till recently, all accommodation granted by the Reserve Bank to the state co-operative banks had to be repaid by a fixed date. This caused a certain amount of difficulty to the co-operative banks and so the Reserve Bank has decided to allow all loans taken by the co-operative banks to run for their full periods. Secondly, the Reserve Bank has continued granting these types of loans at the old rate of one and a half per cent, though the Bank rate was raised from 3 to 3½ p.c. since November, 1951.

These loans are granted to finance short-term requirements of the co-operative movement. The Reserve Bank is also taking an indirect part in financing the long-term requirements of agriculture. The Bank has begun to subscribe to the debentures of land mortgage banks which are guaranteed by the state governments.

All this is encouraging. It has, however, been urged that this is not enough, and that the Reserve Bank ought to take a larger part in providing finance for agriculture. This desire is no doubt understandable. But the difficulty lies in determining the manner in which the Reserve Bank is to grant more loans to agriculture. As a distinguished writer has pointed out, the central bank can grant more loans to agriculture "only if the latter is organised on a large-scale and is in a position to provide good credit-worthy borrowers ; or where it is not so organised, there should exist proper organisations for marketing and other purposes to which the central bank can extend credit with safety."* This can be done if the co-operative movement is properly strengthened and re-organised so as to embrace the rural population.

Suggestions for Reform : In view of the difficulties which cultivators feel for the lack of adequate finance, it has been suggested that the government should take steps for the establishment of an *Agricultural Credit Corporation*. The adoption of such a proposal was made by the Agricultural Finance Sub-Committee of the Government of India (the Gadgil Committee). Pakistan has already set up an Agricultural Development

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A Review of the working of debt legislation : Recent debt legislation has sought to attack the problem of agricultural indebtedness from two directions. It provides for scaling down the amount of debts so as to bring them within the paying capacity of debtors. It has next tried to cure money-lending business of its abuses so that the burden of debts may not grow heavy in the future. What has been the effects of these acts on the organisation and provision of rural finance ?

There is no doubt that they have provided some relief to the cultivators. Statistics published in the different states show that a considerable amount of debts has been scaled down. But the amount actually scaled down forms only a small percentage of the total estimated debts. The problem, therefore, remains to be solved. Moreover, certain defects have been found in the working of the Debt Settlement Boards. On account of their illiteracy, debtors have failed to furnish the names of all debtors. Members of some Boards have been found to be corrupt and inefficient. These defects are of course remediable. But a most serious defect has been the absence of any provision for the regular repayment of the scaled-down debts. Debtors were left to repay the instalments out of their own resources. As these proved insufficient, many of them defaulted in their payments. There was no doubt that if creditors knew that they would get back their money quickly if they agreed to settle, many of them would probably have agreed to accept smaller sums in settlement of their claims. But there was no such machinery to ensure speedy repayment. This was a serious defect in the working of the debt settlement legislation.

Efforts to control money-lenders have not, on the whole, proved successful. Strict enforcement of the Regulation of Money-lenders Acts was not possible as that would require a very large administrative machinery. Moreover, as most of the borrowers are extremely needy, they have often been forced by money-lenders to adopt collusive practices to evade the provisions of the law. For example, needy borrowers have to put down in the documents larger sums than they actually borrowed in order to compensate the money-lenders for the low rates of interest they are forced to charge by law.

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in 1930-31. The burden of such debts rose heavily in the thirties on account of the fall in agricultural prices and the occurrence of distress in the rural areas. The rise of prices during and after the last war probably gave some relief to the cultivators. But there is no doubt that this relief was not enjoyed by the small cultivators and landless labourers. All evidence shows that at the present moment indebtedness is again on the increase among the cultivators on account of a variety of reasons.

Causes of indebtedness: It is not difficult to find out why cultivators have to borrow and are unable to repay the loans. The vast majority of the cultivators are proverbially poor. They have usually very small incomes which is often uncertain. The holdings they cultivate are small in size, and are getting smaller with each passing generation. Small holdings mean small amount of crops and low income. The decay of the village industries has deprived them of the alternative or supplementary sources of income. Hence their incomes remain low. They are, therefore, not in a position to save anything, and no wonder that they have to borrow on every occasion.

Such occasions also arise frequently. If the rains fail or if there is too much rain, there will be crop failure and the cultivator must then borrow to pay rent and to maintain his family. Or if the cattle dies, he has to borrow to replace his live-stock. The demand for the payment of rent by a fixed date may also force the cultivators to borrow for paying the land revenue.

Another prominent factor causing indebtedness is the improvident habits of the majority of the cultivators. They are too fond of litigation and did not hesitate to borrow money for the conduct of a useless suit or for redressing some fancied grievance. The cultivators have also been forced by the conventions of their society to spend beyond their means to perform the *Sradh* ceremonies of their parents, or to marry their daughters.

The malpractices of the money-lenders are also an important cause of agricultural indebtedness. Money-lenders charged very high interest rates and often cheated the illiterate, helpless borrowers by falsifying the accounts. The burden of debts increased heavily as a result of these malpractices..

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4 To what extent has the debt legislation recently enacted in different states helped to solve the problem of agricultural debts ? (Cal 1941 , Panj. 1941)

5 Discuss the role played by the Reserve Bank of India in the provision of rural credit

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Secondly, it was sought to place restrictions on the right to transfer land in order to prevent borrowers from mortgaging their land. The *Punjab Land Alienation Act* of 1901 laid it down that land held by an agriculturist could not be sold to a non-agriculturist, nor could it be mortgaged for more than 20 years. The Act was copied by some other states. The object of this Act was to prevent the passing of land from cultivators to the money-lenders. The utility of the Act had been called in question by a large number of writers. According to them, it had not prevented the passage of land from borrowers to money-lenders as the more prosperous agriculturists adopted the profession of money-lending and the provisions of the Act did not apply to them. The Act, moreover, resulted in a restriction of credit. Those Acts have been repealed under the new constitution.

Thirdly, the government also tried to provide cheap credit to the cultivators. This was sought to be done in two ways. First, the government passed two Acts, the Land Improvement Loans Act of 1883 and the Agriculturist's Loans Act of 1884. Under the former Act, it granted loans to cultivators, repayable over long periods, in order to enable them to carry out permanent improvements to land. Under the second Act, short-term loans were granted for current agricultural needs. These loans are called *Takavi* loans. These loans are given mostly during periods of scarcity. They are not very popular with the cultivators as the latter have to go through too many formalities before being granted loans.

The next step taken by the government was to organise the co-operative movement. Acts were passed in 1904 and 1912, under which co-operative credit societies were started. These societies were formed by the cultivators and granted loans to the members. Land mortgage banks have also been started to grant long-term loans for the repayment of debts. But these societies and banks are still too few as compared to the needs of the cultivators.

Recent Debt Legislation : All these measures were adopted before the first world war. But while they gave some relief to the harassed cultivators, they failed to solve the problem. The burden of debts continued rising, and matters came to a head with the advent of the world trade depression of the thirties. This depression caused a serious fall in agricultural prices as

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on these debentures in case the land mortgage banks fail to meet their obligations. The funds thus obtained are lent to farmers against the mortgage of their land and are generally repayable in small annual instalments over a number of years.

Land Mortgage Banks in India: The earliest attempt at establishing a separate land mortgage bank was made at Jhang in the Punjab in 1920. Madras followed suit by organising two land mortgage banks in 1925, and Bombay by establishing three banks in 1929. The movement then spread to other states.

Madras holds the pride of place in the organisation of land mortgage banks. Though the first banks were started in that state in 1925, the real beginning came after the establishment of a Central Land Mortgage Bank in 1929 for centralising the issue of debentures. In the course of the next 20 years the number of primary banks have increased to 119 in Madras. Bombay organised the Provincial Land Mortgage Bank in 1935, and high hopes were entertained about the progress of land mortgage banking in the state. But the progress achieved has not been as satisfactory as in Madras. In 1951, there were five Central Land Mortgage Banks in Madras, Bombay, Mysore, Orissa and Travancore-Cochin. The number of primary land mortgage banks in all states amounted to 283. In 1949-50, they advanced loans amounting to Rs 101 lakhs. The movement has, however, made insignificant progress in the states of West Bengal (where there are only 2 primary land mortgage banks), Assam (only 2 banks), U P (only 6 banks), Rajasthan (only 10 societies) etc.

Most of the Central Land Mortgage Banks are organised on a quasi-co-operative basis. They have been formed by the primary land mortgage banks and individual shareholders. Their primary business is to float debentures, and to co-ordinate the working of primary banks. They advance loans mainly for repayment of past debts, for the purchase and improvement of land. Loans are given up to one-half of the value of the land mortgaged and the period of the loan is 20 years, repayable in equal annual instalments. The land mortgage banks receive assistance from the government in various ways. In Madras, for example, the government has guaranteed the payment of interest and the repayment of debentures issued by the Central Land Mortgage Bank. The banks have been granted the power

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In addition to scaling down debts, some of these Acts included provisions for rural bankruptcy. If it was found that the assets of a borrower were insufficient to repay the debts, may be declared to be an insolvent, and his assets excluding the homestead land and a certain amount of land for the subsistence of his family are to be sold and the proceeds will then be utilised to repay the debts. These provisions exist in West Bengal, the Punjab and Madhya Pradesh.

Regulation of money-lending*: Regulation of money-lending has also been an integral part of recent debt legislation. But legislation to curb the malpractices of money-lenders was passed as early as 1879 when the Deccan Agriculturist's Relief Act authorised the courts to examine the account of a debt transaction and to reduce the rate of interest. The next important legislation on the subject was the Usurious Loans Act, adopted in 1918. It authorised the courts to re-open a debt transaction and to reduce excessive rates of interest. But these Acts remained, more or less, a dead letter on account of the illiteracy, ignorance and helplessness of the cultivators. In the nineteen thirties, the government of the Punjab took the first step to undertake legislation on this subject by passing the Regulation of Accounts Act in 1930. This was followed by other states.

The main provisions of these acts relate to the registration and issue of license to money-lenders, regulation of their accounts and limitation of interest rates. Usually money-lenders have to register themselves and to take out a license from the government before they are allowed to conduct their business. The license may be cancelled for non-compliance with the provisions of the Act and for dishonesty. Secondly, every money-lender has to maintain regular accounts of all his transactions, to give proper receipts to all debtors for any repayment and may have to furnish to his debtors a periodic statement of their liabilities. Thirdly, these Acts have sought to lay down maximum rates of interest that may be charged by money-lenders. A distinction is made between secured and unsecured loans, the maximum permissible rates of interest being higher on the latter type of loans. These rates usually vary between 6 to 12 p.c. (18 p.c. in

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CHAPTER 11

AGRICULTURAL MARKETING

In ancient times agriculture was carried on in India on subsistence basis. The farmers raised sufficient crops to maintain their families, and sold only a small portion of the crops in the market. The problem of marketing was thus comparatively simple. But the character of agriculture has undergone considerable change in recent years. Cash crops like jute, cotton, sugarcane, tobacco etc., are grown largely for sale in the market and a considerable part of the food crops is also offered for sale in the market. The need for a good marketing organisation has, therefore, grown. A good marketing organisation will enable the cultivators to receive proper price for produce.

Defects in Marketing : Unfortunately the Indian cultivator markets his produce under the most disadvantageous conditions. If he wants to sell his crops in the open market, he has to face a great many difficulties. He may bring his produce to the village hats or markets on the weekly market days. But this is often inconvenient on account of bad roads and transport conditions. Villages do not possess good roads and means of transport are often primitive. Moreover, he cannot always spare the time to attend the market and sell the produce directly. No wonder that the cultivator prefers to sell his crops in the villages to a *bapari* or middlemen.

More often than not, the cultivator is not free to sell his crops in the market. On account of his poverty and other reasons, he has previously obtained loans from the village mahajans to whom he is under obligation to sell the crops. These mahajans do not always pay the proper market price to their debtors.

Even if he manages to take his crops to the *mandi* or big markets, he has to face many handicaps. He does not always know the prevailing market price for the variety of crops he has to sell. On account of his ignorance it is inevitable that he should come off second best in his contest with the high specialised knowledge and the vastly superior resources of the buyers. Secondly, as weights, scales and measures are not standardised

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One result of the working of both these types of legislation has been the restriction of credit facilities in the villages. Cultivators are now finding it increasingly difficult to get new loans. Money-lenders are unwilling to lend except to old and trusted borrowers who agree not to go to the courts and to adopt collusive practices. They are also unwilling to lend to debtors whose debts have been scaled down by the Boards until the last instalment has been paid. Opinion is, however, divided on the question whether such a restriction of credit is harmful or not. It has been argued that such a restriction of credit is, on the whole, beneficial as it would discourage borrowing for unproductive purposes.

These laws have provided palliatives. But they have not solved the problem of rural indebtedness. As one writer has aptly put it, these laws are of "the nature of ambulance work", stopping bleeding and the source of further infiltration of the disease, by applying antiseptics and bandaging". They do not go to the root of the problem. Unless proper remedies are found for the causes that force cultivators to borrow, a lasting solution of the problem cannot be expected. While it is desirable that the mal-practices of money-lenders should be curbed, it is necessary to remember that their services are indispensable in the prevailing state of credit in rural areas. Effective measures should, therefore, be taken to harness the experience and knowledge of the money-lenders to the organisation of rural credit. The crux of the problem is the extremely low incomes of the cultivators. A real solution of the problem of rural debts will, therefore, be found only when far-reaching improvements are carried out in agriculture, with a view to raise the incomes of the cultivators.

EXERCISES

1. Describe the arrangements for providing credit to the cultivators. Are they adequate and efficient? Suggest some improvements. (All. 1937 ; Cal. 1942 ; Del. 1936).
2. What are your suggestions for the re-organisation of rural credit in this country? (Bom. 1953).
3. Discuss the causes of rural indebtedness in India. What steps have been taken by the government to solve this problem? (All. 1943 ; Del. 1939 ; Cal. 1950 ; Panj. 1935).

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that out of every rupee paid by consumers for different commodities, marketing charges amount to 73.6 p c, in the case of grapes, 57.72 p c, in the case of oranges, 43.9 p c, in the case of tobacco, and potatoes, 33.2 p c, in the case of rice and 31.5 p c. in the case of wheat

Remedies: The proposals adopted by the government for remedying the defects in the marketing organisation may be classified into three groups, viz., establishment of regulated markets, organisation of co-operative marketing, and some miscellaneous measures

(A) **Regulated Markets:** Such markets were started in 1897 to regulate the sale of raw cotton in Berar. The main outlines of this proposal are the establishment of markets in the main centres of trade where committees are set up to control trade practices and regulate market charges. These market committees consist of the representatives of growers, and traders, and their principal function is to standardise the market practices, reduce charges and to keep watch over the weights and scales in use. Acts have been passed in several states (i.e. Bombay, M.P. Madras, the Punjab, Mysore and Hyderabad), providing for the establishment of regulated markets. Such markets confer great benefits on the growers. They can get full information regarding the current market prices, which are posted in the market from time to time. They may sell their produce openly, and have not to pay unreasonable market charges. Some of the market committees provide facilities such as sheds for cattle, godowns etc.

(B) **Co-operative Marketing:** The second step taken by the government is the organisation of co-operative marketing societies. A number of cultivators join together to form such a society, which sells the produce of the members in the market and then distribute the sale proceeds after deducting its own charges. Co-operative marketing has achieved very great success in the U.S.A., and the agricultural countries of Europe.

In India, some progress has been achieved in the organisation of co-operative marketing societies. In 1949-50, there were in all 6907 primary societies, which handled goods worth Rs. 25.07 crores. In Bombay, cotton trade on a co-operative basis has been organised throughout the state. Co-operative cotton sale societies numbered 84 in 1949-50 among which there were 11

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CHAPTER 10

AGRICULTURAL FINANCE : LONG TERM CAPITAL

In the previous chapter we discussed the organisation for providing short-term finance to the cultivators. The peasants also require finance for longer periods as well. They must have money to buy cattle and ordinary farming implements, and loans taken for these purposes can be repaid, not at the end of the agricultural season, but during a much longer period varying from one to five years. This is known as *intermediate-term credit*. They also require loans for longer periods varying from 5 to (say) 25 years for purposes like the purchase of costly implements, or of land or making permanent improvements to land such as the construction of wells etc.

Need for Land Mortgage Banks : The organisation for the supply of finance for long periods is also extremely defective. Co-operative credit societies cannot afford to grant such types of loans. Their resources are limited and they cannot afford to lock them up in long-term loans. The money-lenders who provide the bulk of short-term loans do not also like to lock up their money in long-term loans. They prefer the quick and the surer returns of short-term loans. The government, of course, grants some loans for long periods under the Land Improvements Loans Act of 1883. But the funds provided by the government are extremely inadequate, and borrowers do not like the endless formalities involved in the granting of government loans. There is, therefore, a great need for setting up institutions for the supply of long-term finance to agriculturists.

General features of Land Mortgage Banks* : The experience of other countries shows that long-term loans to agriculturists are best provided through land mortgage banks or land credit institutions. Land mortgage banks have been organised either on the co-operative principle or on the joint-stock company principle. They obtain their funds primarily by the sale of long-term debentures in the market. These debentures are secured by mortgages on land obtained from the borrowers. In many cases, governments have guaranteed to repay the principal and interest

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larger incomes to the growers. They may also build godowns or warehouses where the produce may be kept in stock, pending sale in the markets. The government should, therefore, make greater effort to organise the movement as to cover all villages.

(C) **Other remedies:** The government has also undertaken a number of other measures to ensure better marketing of agricultural produce.

(a) **Regular and Standardisation of weights:** The central legislature has passed the standards of weights Act in 1939 to secure standardisation of weights and measures.

(b) **Grading of crops:** The government has also passed the Agricultural Produce (Grading and Marketing) Act in 1937. Under this Act, the Agricultural Departments undertake to fix the grades of the produce and put their seal as a guarantee of quality. These AGMARK products have become increasingly popular in the country.

(c) **Warehousing:** Following the recommendations of the Rural Banking Enquiry Committee of 1950, a number of states have passed legislation to facilitate the building of godowns and warehouses in important marketing centres. Such warehouses would not only provide storage facilities for keeping the produce in stock, but they would also serve as a channel for the supply of finance to the growers. The certificates issued by these licensed warehouses can be discounted at the banks and the latter can rediscount them with the Reserve Bank of India.

(d) **Marketing Organisation.** The central and the state governments have set up marketing organisations to carry out surveys of the marketing conditions. These marketing officers have carried out important surveys regarding the actual conditions under which different crops are marketed. They have also undertaken the task of grading the produce and issuing the "Agmark" seal. They also help in the development of regulated markets and in spreading correct news regarding prices, and stocks, which are often broadcast through the A.I.R.

EXERCISES

1. Describe the present system of marketing of agricultural produce. Point out the defects of this system and show how they can be overcome or mitigated. (All 1931, Cal 1913; Panj 1941, Pat. 1910).

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In spite of the high utility of land mortgage banking in India, its development has not made much headway except in Madras, Bombay and Mysore. Even in these states, the bulk of the loans granted by them have been granted for redemption of old debts. This is unfortunate as land mortgage banks should play greater attention to finance land improvements designed to increase food production. Both in Madras and Bombay, the state governments are trying to encourage these banks to finance land improvement. In Bombay, the government have permitted land mortgage banks to extend loans for the construction of wells, for housing and for the purchase of costly agricultural implements. These loans are to be given at concessional rates, the government undertaking to make up any loss sustained by the banks on that account. It should, however, be remembered that the task of financing of land improvement by land mortgage banks bristled with difficulties. The banks have no machinery to examine and assess the various schemes of land improvement.

Land mortgage banks have gained a new significance on account of the urgent need for increasing food production. Where such banks have worked well as in Madras, they have not only saved many farmers from losing their land during the years of depression, but have also succeeded in reducing their burden of debts. What is now necessary is that these banks should now turn to an increasing extent to the task of financing the long-term requirements of the farmers for carrying out various schemes of land improvement.

EXERCISES

1. Discuss the need of the cultivators for long-term credit. Point out in this connection the scope and functions of Land Mortgage Banks. (Ag. 1939 ; Cal. 1943 ; Panj. 1939 ; Mad. 1937).
2. Give a critical account of land mortgage banks in India and indicate the sources from which they derive their funds. (Cal. 1953).

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CHAPTER 12

THE AGRICULTURIST AND AGRICULTURAL LABOUR

The Agriculturist: Efficiency of the human factor is one of the most elements in determining productivity. How far are the cultivators efficient ?

There is a difference of opinion regarding the efficiency of the Indian cultivators. Dr. Voeleker spoke highly of the efficiency and careful husbandry of the Indian agriculturist. The Royal Commission on Agriculture also admitted the fact that most of the agriculturists were, more or less, efficient. There is no doubt that most of them possess a good knowledge about the soil conditions and the suitability of particular crops for different types of soil, season etc. This may be readily admitted. But there is no doubt that the average productivity of the Indian cultivator is much less than that of her European or American brother. This is due to a variety of circumstances, over most of which the peasant has no control.

One important reason for such low efficiency is the fact that the Indian cultivators possess ill health and this has sapped their vitality. On account of their poverty, they cannot afford to have good food in sufficient quantities, as a result of which they fall an easy victim to various diseases like malaria etc. A man in poor health cannot work hard. A second reason is the illiteracy of the cultivators. On account of the lack of education, they do not always get proper knowledge about scientific methods of agriculture. Their improvident and reckless habits are also the result, to some extent, of their ignorance and illiteracy. This lack of ambition and initiative is due to centuries of extreme poverty. Much has been written about their conservatism. But agriculturists all over the world are usually more conservative than the city dwellers. Moreover, time and again it has been proved that when the usefulness of new methods or implements is definitely proved, the cultivators are not slow to adopt them. Part of their conservatism may also be due to the lack of education.

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Fourthly, some of the market practices are reprehensible. The price is often settled under cover. "Both the *arthiyas* put their land under a piece of cloth and start catching one another's fingers. The negotiations go on in this secret manner." The seller does not usually get the proper price as a consequence.

Fifthly, but the greatest defect is the fact that there is a whole host of middlemen between the grower and the ultimate consumer, the *beparis*, *farias*, *kachha*, *arthiyas*, *pacca arthiyas* and others. The larger the number of middlemen, the smaller must be the share of the cultivators. These middlemen not only fleece the growers, they also resort to adulteration, dumping and other illegitimate practices. Stone chips are mixed in rice; groundnut and tamarind are soaked in water to increase their weight. As a result of such adulteration and other malpractices, the quality of the produce is lowered. Low quality and reputation inevitably lead to lower prices.

Lastly, another difficulty is due to the fact that most of the cultivators have very little holding power on account of their poverty. They are poor and often heavily in debt. So they are forced to sell their crops almost immediately after the harvest to meet the pressing demand of the money-lenders for repayment and of the rent collectors. Prices generally touch the bottom immediately after the harvest when every cultivator is eager to sell. Thus farmers who have to sell at a most unfavourable period receive the lowest prices.

Thus the high cost and inconvenience of transport, their ignorance regarding market conditions, the unregulated practice of bidding, unreliable weights and scales, the manifold deductions made in the markets, large numbers of middlemen and their malpractices, and the lack of holding power on account of poverty and indebtedness—these are the most important defects in the marketing organisation. As a consequence of these defects, there is a considerable price-spread between the prices paid by consumers and prices received by growers. It has been estimated

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Lastly, another difficulty is due to the fact that most of the cultivators have very little holding power on account of their poverty. They are poor and often heavily in debt. So they are forced to sell their crops almost immediately after the harvest to meet the pressing demand of the money-lenders for repayment and of the rent collectors. Prices generally touch the bottom immediately after the harvest when every cultivator is eager to sell. Thus farmers who have to sell at a most unfavourable period receive the lowest prices.

Thus the high cost and inconvenience of transport, their ignorance regarding market conditions, the unregulated practice of bidding, unreliable weights and scales, the manifold deductions made in the markets, large numbers of middlemen and their malpractices, and the lack of holding power on account of poverty and indebtedness—these are the most important defects in the marketing organisation. As a consequence of these defects, there is a considerable price-spread between the prices paid by consumers and prices received by growers. It has been estimated

made by the Ministry of Labour, Government of India regarding the conditions of agricultural labour in selected villages in different states. These surveys show that a considerable percentage of the agricultural families, from 15 to 40 per cent., consists of agricultural labourers. The average daily wages for these workers were generally Re 1 to Rs. 1/4/ for men, including the cash value of perquisites. Women and children were paid as 5 to as 8 in cash or in kind and were generally employed for lighter operations and shorter hours. In the vast majority of cases, the average annual expenditure was larger than the income. According to the official survey, the average annual income per family of agricultural workers varied between Rs 273 6 in Khuntia (Orissa) to Rs 641 5 in Brindabanpur (West Bengal); while the average annual expenditure varied between Rs 280 in Khuntia to Rs 749 0 in Brindabanpur. The expenditure on food was the highest, being more than 80 p.c. of the total expenditure. In spite of that, their diet was poor both in quantity and quality. Majority of them were in debts. The average number of days for which such workers were employed varied between 176 days to 275 days. There is no limit on the hours of work. Hence they suffer considerably from seasonal unemployment, the period of unemployment ranging from 3 to 6 months.

Another unfortunate result is that a section of agricultural labourers has been reduced to the status of *de facto* slaves, such as the Hallis in Bombay, the Kamyas in Bihar.

Remedial measures: There is no doubt that the existence of such a large number of agricultural labourers who lack sustained employment is to be regarded as a source of serious weakness and even of instability in the present agrarian system. The Planning Commission have, therefore, recommended a number of steps for remedying this state of affairs. According to the Commission, the Bhoodan movement should be encouraged with special assistance as it provides a means for settling landless workers on land. (b) Moreover, blocks of newly reclaimed land and culturable waste land should be set apart for the settlement of landless workers and of small holders on the co-operative basis. (c) Groups of workers should be organised into labour co-operatives and these should be employed extensively for the construction of local irrigation and other works.

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ginning and pressing societies. Bombay has also started as apex marketing institution in the name of the Bombay Provincial Co-operative Marketing Society for the purpose of coordinating the activities of individual marketing societies. In the U.P., considerable progress has been made in organising co-operative marketing of sugarcane, ghee etc. The sugarcane co-operative sale societies supply 85 to 90 p.c. of the total cane crushed in the factories in the state. Besides marketing cane, they have ensured correct weighment to the cultivators, popularised improved varieties of cane and promoted the adoption of improved methods of cultivation. There were also 630 ghee societies in the U.P. in 1949-50 with a membership of 17850. These societies purchase ghee from the members and market it at the most favourable prices. The ghee societies are affiliated to central ghee unions which maintain a paid staff to collect ghee. The apex organisation for all co-operative marketing societies is the Uttar Pradesh Co-operative Development and Marketing Federation.

In Madras, co-operative Paddy Sale Societies have made some progress. There are also co-operative societies for the marketing of fruits, vegetables etc.

In spite of this achievement, the progress of co-operative marketing is not at all satisfactory. The main reasons for such small progress are the lack of efficient men and want of loyalty of the members. Men who possess the efficiency and knowledge necessary for the proper management of a marketing society are not easily found from among the illiterate growers. Secondly, the first essential condition for the success of a co-operative marketing society is that the members of a society should bring their produce to the society. But on many occasions members have not been able to resist the temptation of selling their produce independently whenever the chance rose of getting slightly higher prices. No society can work successfully under such a condition.

There is not doubt that many of the defects in the system of agricultural marketing can be solved by a good co-operative marketing society. Such a society will save the illiterate growers from many malpractices like false weighing, unreasonable market charges, lack of information regarding marketing condition etc. They can arrange for finance by the grant of advances and so prevent the forced sale of crops after harvest. They serve to cut down the number of middlemen, and so help in bringing

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The Planning Commission have recommended a number of steps for organising appropriate soil conservation measures. Each state should, in their opinion, pass the necessary soil conservation legislation. It should also carry out a survey for the demarcation of the main areas affected by erosion, and then adopt proper remedies for soil conservation. The government have already established a research station at Jodhpur to study the problem of checking the advance of the Rajasthan desert. Already good results have been obtained in this connection by the adoption of the policy of creation of vegetation belts.

Soil deterioration and manuring: Another problem is the danger of the exhaustion of the soil in India. Estimates of the yield of crops published from time to time show that there has been a decline in the yield per acre. This declining trend has given rise to the question, whether the soil of India is getting exhausted or not. As early as 1893 Dr Voelcker raised this question in his report and pointed out that though there was no positive evidence of soil exhaustion, careful observers were, however, afraid of such a fact. The Royal Commission of Agricultural, writing 35 years after Dr Voelcker, also drew attention to the difficulty of determining this question on account of the paucity of data over any long period of time. The Commission concluded that a balance had been established and no further deterioration was likely to take place under existing conditions of cultivation.

Whatever the actual state of soil exhaustion, the presumption is that the fertility of the India soil is declining. There are good reasons for such expectation. It is well-known that what is removed from the soil in the form of crops should also be restored to it in some other form. Continuous cultivation of land is bound to reduce fertility unless manure is given to land in proper proportions. On account of poverty and certain other factors, only a small amount of manure is applied by the cultivator to his land. The most readily available manure, cowdung, is burnt as cakes on account of the non-availability

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All this points to the supreme need for the spread of the right kind of education among the masses. The peasants must not only be educated in the three R's, provisions should also be made to teach them knowledge about the rules of health and the scientific methods of education. Stress should also be laid on teaching them the virtues of thrift and the uselessness of unnecessary expenditure.

Agricultural Labour: The term, agricultural labour, is generally intended to include all persons who are hired for carrying on agricultural operations on a permanent or temporary basis. Such persons may or may not own any plot of land which they cultivate on their own account. In fact, there is a large section of petty tenants or sub-tenants who possess only a fractional area of land which hardly returns enough for their subsistence. These men are forced to work as labourers on the fields of others in order to supplement the meagre earnings from their own land. A close analysis of the census figures of India reveals an increasing tendency of agricultural labour becoming landless. Moreover, the number of such labourers is gradually increasing in the country. In 1882, the census report gave 7½ millions as "landless day labourers" in agriculture, and this number increased to 33 millions in 1931 and to about 44.3 millions in 1951. These are divided into two groups, namely, casual workers and attached workers. Attached workers are those who get work for a month or more at a time, while casual workers, who constitute about 89 p.c. of the total number, are never sure of getting employment for a continuous period.

Conditions of agricultural labour: There is a great diversity of conditions under which agricultural labourers live and work. But all authorities are agreed that their working conditions are worse than those of industrial labour. Industrial labour is better organised in trade unions and other organisations and has, therefore, greater bargaining strength. Conditions of housing amenities, terms and conditions of employment and other measures initiated by the government as well as employees have of late improved the conditions of industrial labour. But agricultural labour is scattered all over the land, and until recently, not much attention was paid to study the conditions under which these workers work and live. Some information has now become available as a result of a series of enquiries

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Oil Cakes : Oil cakes which remain after oil are crushed from the seeds of cotton, groundnut, mustard etc., are a valuable source of nitrogen. Unfortunately these oil seeds were exported to foreign countries, as a result of which oil cakes were lost. Recently we have begun to manufacture oil in our country. A good deal of propaganda should be carried on to popularise the use of this form of manure.

Chemical fertilisers : In the western countries manure is supplied to land in the form of sulphate of ammonia, nitrate of soda etc. These had to be imported from foreign countries and were also expensive. Recently the Government of India have set up a factory at Sindri in Bihar for the manufacture of artificial fertilisers. Production has already been started in this factory and it is expected that we would become self-sufficient in this respect within a near future.

The Cattle. The importance of cattle arises on account of the fact that it provides the only motive power in agricultural operations. In western countries horses were used in ploughing land, and are now being replaced by machines. Cattle are valued mainly for their meat and milk. But in India cattle are used for ploughing land, for transporting the produce and lastly, for providing milk. The importance of the cattle is, therefore, greater in our country than in the west.

In spite of the importance of the cattle, there are certain disquieting features in regard to our cattle population. In the first place, the total number of cattle is very large as compared to the needs of tillage. It has been estimated that we have about 100 cattle per 100 acres of cultivated land as against 38 cattle in Holland and 25 cattle in Egypt. Secondly, a large number of cattle in India are old and decrepit, and constitute a great burden on an already impoverished land. This is due to the prejudice among the Hindus against cow-killing. Moreover, there is a vicious circle of excess numbers and poor quality. The worse the quality of cattle, the greater becomes the need for having larger numbers. As the number of cattle increases, the pressure on the available supply of fodder leads to poor health and small strength in the cattle. As cattle grow smaller in size and poorer in health, farmers are forced to breed more and more cattle. The vicious circle goes on in this way. Thus we find in the country large numbers of weak, small-sized cattle and this involves a serious drain on our scanty fodder resources.

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(d) The various governments should provide financial assistance to co-operative groups of landless workers to enable them to build houses, purchase bullocks and implements and to get training in ancillary industries. (e) States should grant special assistance on an extensive scale by way of educational stipends and for vocational and technical training. Lastly, the minimum wages act should be applied to raise wages of these agricultural workers.

Fixation of minimum wages of agricultural labour: The only attempt that the government has made to improve the conditions of agricultural labour is by including it within the scope of the Minimum Wages Act of 1948. Under that Act, the state governments were required to fix the minimum wages for agricultural labour within a period of 3 years. Many state governments have already taken steps to fix minimum wages of agricultural labour. The main difficulty has been the absence of any data regarding the actual wages received by agricultural workers. To stop this gap in our knowledge, the Ministry of Labour conducted enquiries regarding the conditions of agricultural labour in about 2,000 villages. Such sample surveys have been completed.

Even after minimum wages are fixed, the next difficulty will be the proper enforcement of the wage rates. Agricultural labour is absolutely unorganised and wholly illiterate. Moreover, it is scattered over a large area as a result of which organisation of such labour into unions would be difficult. Enforcement of minimum wages becomes almost impossible on account of the lack of trade unions.

Another difficulty will arise on account of the fact that agriculture is not on many occasions a paying proposition in our country. Unless steps are taken to stabilise agricultural prices at a level which will give proper return to the cultivators, fixation of minimum wages will raise more difficulties than it will solve.

EXERCISES

1. Describe the handicaps you know of the agricultural labourers in your locality. What measures would you propose to improve their living conditions? (Punj. 1953; Mad. 1958).

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SOIL EROSION AND OTHER PROBLEMS

Soil Erosion : The problem arises on account of the fact that the surface soil is often wasted away by excessive rains or by the flooding of rivers. As a result, large areas of land have become unfit for cultivation. The problem is of special importance in West Bengal, the U.P., and the Punjab.

There are many factors that are responsible for soil erosion. Under ordinary conditions, the soil cannot be wasted away if there are sufficient trees on the land or if the soil is covered by grass or other green vegetation. So the principal causes of the erosion of soil are (1) the indiscriminate cutting down of trees, and (2) removal of grass or vegetation on account of uncontrolled grazing by goats or cattle. The continuously increasing pressure of population on land has led to large-scale deforestation in order to meet the needs for fuel. The consequence of such deforestation is that the soil is left unprotected and gets washed away during heavy rains or flooding. Cultivation on the slopes of hills has also been known to result in soil erosion.

Soil erosion results in serious evils. In the first place, the first few inches of the surface soil are a store of nutritive chemicals and organic matter. Loss of this matter reduces the productivity of land. Secondly, as soil erosion proceeds, the land gets drier, and on account of the absence of such windbreaks as trees, bushes, hedges and grass, the area becomes more liable to storms of dust and sand. All these results do not occur within a year or two. But in course of decades, soil erosion would lead to abandoned regions, run-down communities, and wandering agriculturists. No wonder that soil erosion has been regarded as "creeping death."

The main remedy against the evils of soil erosion is to be found in a policy of afforestation. The trees of the forest protect and conserve the soil. Their roots and the grasses check the flow of rain or flood water and thus help seepage. They hold together the soil particles tightly and thus prevent soil erosion.

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the large majority of cases, owners themselves cultivate the land. But in cases of large holding, a portion is let out to tenants. This system prevails in Bombay, Madras, Assam, and parts of the Punjab

In the *mahaliwari system of tenure*, land is held jointly by co-sharing bodies of villagers or village communities. The government has recognised the rights of ownership of such bodies. The whole estate is assessed by the government to one sum of land revenue, and all members are jointly and severally responsible for the payment of land revenue. In the Punjab, the government recognises one of the members of the village community as the headman who is called the *lambardar*. The system prevails in the Punjab and the U P. In the former state owners themselves cultivate the land, while in the U P., cultivation is usually done by a class of tenants.

In the *zamindari system of tenure*, land is owned by the landlord who is responsible to the government for the payment of revenue. Actual cultivation is carried on by tenants who hold land under landlords. There are two different types of *zamindari tenure*. In the first type, known as the permanent settlement, the revenue to be paid by the landlord has been fixed in perpetuity and cannot be increased by the government. The landlord is, however, free to raise the rent to be paid by his tenants. This system prevails or prevailed in West Bengal, Bihar, Orissa, parts of Madras and Assam and the U P. In the second type of *zamindari system*, the revenue to be paid by the landlords is revised from time to time. This system prevailed in Oudh and Agra in the U P., and in the M P. In the Madhya Pradesh, the government found a number of persons who were originally farmers of taxes under the Marathas and who claimed the rights of a landlord. They were recognised as landlords by the government and are known as *malguzars*. The revenue to be paid by the *malguzars* is revised periodically. The system is also known as the *malguzari system*.

Merits and defects of these systems: Very few people now-a-days find any merits in the *zamindari system* as it prevails today. Under the ideal *zamindari system*, the landlord lives in the village, invests large sums of money on the improvement of land and places his knowledge of scientific agriculture at the disposal of his tenants. But in the *zamindari system* which

the large majority of cases, owners themselves cultivate the land. But in cases of large holding, a portion is let out to tenants. This system prevails in Bombay, Madras, Assam, and parts of the Punjab

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of cheap fuel. Prejudices stand in the way of the use of fish or bone. Oil seeds were, until recently, exported and so we lost the oil cake. Hence our farmers could use only small quantities of manure.

The question of the application of manure is of highest importance for increasing the yield from land. But unfortunately the supply of manure is extremely inadequate in this country. The usual sources of manure are cowdung, green manuring, bones and fish, night soil, oil cakes and chemical fertilisers.

Cow-dung : It is the most commonly available manure in the villages whose cattle population numbers about 200 millions. Unfortunately this is burnt as fuel by the cultivator as generally they have nothing else they could use as fuel. The urine of the cattle, which may also be used as manure, is usually allowed to go to waste. This is a great loss. The only way of stopping this suicidal practice is to provide alternative sources of supply of fuel. Quick growing trees should be planted all round the villages to provide cheap fuel for the cultivators. Villagers should also be taught to dig pits for preserving manure.

Green manuring : This is one of the most important methods for restoring organic matter to the soil. Leguminous crops are grown and ploughed back into the soil before the next food or cash crop is grown. Such crops increase the humus and nitrogen content of the soil. They also protect the soil against erosion. The Indian cultivator knows the value of this method and what is now necessary is for the government to carry on an intensive propaganda in favour of green manuring and to distribute seeds of these crops among the cultivators.

Bones and Fish : These serve to fertilise the land as they supply nitrogen to the soil. But on account of social prejudice, these are not much used by the cultivators. Such prejudice dies hard and this is a great difficulty.

Night Soil : It is a valuable manure, which is unfortunately not much used in our country on account of the prejudices of the cultivators. Some municipalities have begun to manufacture poudrette from night soil. In the villages trench latrines can be dug for composing human excreta. This will provide manure and improve the sanitation of the villages.

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extended to other states. Though the system as adopted in different states is, in essentials, the same, there are some differences with regard to the principles of assessment. In Madras, the first step in the process of assessment is the preparation of what is called the cadastral record. The settlement officers visit different villages and carry out a classification of soils according to their productive capacity. Experiments are then carried out on different classes of soil to determine their normal yield. The next step is the determination of the value of the estimated amount of crops on the basis of the average of the prices prevailing in the last 20 years. In this way the value of the produce on each class of soil is determined. From this gross value, deductions are made on account of the estimated cost of production including costs of transport. The sum that remains is the net profit from each acre of land on different classes of soil. Not more than 50 p.c. of the net profits is to be fixed as the land revenue. This is how the original assessment was made. Re-assessment is made at the end of every 30 years, when the amount of land revenue is raised or lowered, depending on the extent of the change in average prices over the last 20 years. Whatever the rise in average prices, revenue cannot be enhanced beyond $18\frac{3}{4}$ per cent of the old demand.

The principles of assessment are nearly the same in Bombay. But in Bombay revenue is assessed on the basis of the purpose for which land is used and on the basis of the kind of crops grown on land. Moreover, at the time of re-settlement, changes in the land revenue demand are made, not on the basis of average prices, but on general economic considerations.

Principles of assessment under the mahalwari system - The method followed in fixing the land revenue is similar in many respects to that under the ryotwari system. In the Punjab, the settlement officers undertake a survey of all land in the villages, classify the soil, and determine the average yield from each class of soil. The next step is the determination of the money value of the gross produce on the basis of average prices. Out of this sum the officers determine the net produce or net assets as being equal to the rent, or that portion of the gross produce which would have, if the land were rented, been taken by the landlord. The share of the government is fixed generally at one-fourth of the net assets. In the U.P., the share

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Improvements in Livestock : The necessity to improve the quality of cattle arises not only on account of their usefulness in agricultural operations, but also for increasing the supply of milk in the country. Milk is one of the most important protective foods. It has been rightly said that the health and the intelligence of children depend largely on the quality and amount of milk, consumed by them. Unfortunately, the per capita consumption of milk is extremely low. It does not on the average exceed six to seven ounces per head per day. This is due to the large numbers of people in our country and to the fact that the annual production of milk per head of cattle is very low. While the annual production of milk per head of cattle in India has been estimated to be 30 gallons, it is 389 gallons in Denmark, and 326 gallons in Sweden etc. We must, therefore, take steps to improve the quality of cattle so as to get more milk.

Three things are necessary to improve the quality of cattle, —better feeding, better breeding and better veterinary arrangements.

Cattle's diet : Like their owners, Indian cattle are also underfed on account of the inadequate supply of fodder and other articles of cattle diet. Several steps may be suggested to improve the diet of the cattle. Investigation has shown that a mixture of oil-cakes, bran, barley and gram husk provides a good protective food. Fortunately the production and supply of oil cakes are increasing on account of the growth of the oil pressing industry in the country. In order to increase the berseen and other grasses and fodder, attention should be paid to conserve the pasture lands and to control grazing during the monsoons so as to increase the yield of grass. Wherever it is possible dual purpose crops like jowar, bajra, millets and pulses should be introduced. These will provide additional fodder.

Better breeding : The stock of cattle has deteriorated on account of indiscriminate breeding. To improve breeding, three steps are necessary. First, better breeds of cattle ought to be popularised by organising cattle shows etc. Secondly, arrangements should be made for making better breeds of bulls available for the purpose of cross-breeding on easy terms. Lastly, undesirable bulls should be prevented from breeding.

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The perpetual fixity of land revenue had other consequences. In the first place, different governments felt no inducement to invest capital on land improvement, since the benefits of such improvement would be enjoyed only by private landlords. Moreover, zemindars belied Lord Cornwallis's expectations, and did not invest much capital on their land. They began to live a life of luxury in the cities, leaving the management of their estates to paid servants.

A second consequence has been the fact that governments lost all contact with the rural areas as they did not consider it necessary to maintain the staff for that purpose. The interests of the cultivators suffered as a result. Cultivators also suffered in other ways. In the ryotwari areas, the government usually granted remissions of land revenue in areas suffering from a failure of crops due to drought or flood. But in the permanently settled areas, the land revenue was fixed for all time and the government insisted on collecting the full revenue from zemindars in all years, good or bad. The zemindars, in their turn, collected their rent from ryots even in years of drought or flood. The lot of the cultivators living in permanently settled areas thus became worse than that of their brothers in ryotwari areas.

Cultivators suffered on another account. In order to enable landlords to pay the revenue in time, the government passed a series of regulations in their favour. Zemindars took advantage of them and began to ignore all the customary rights of the

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CHAPTER 14

LAND TENURES AND LAND TENANCY

In the discussion of the causes of low productivity in agriculture, it has already been noted that the system under which land is owned and cultivated in India is also an important contributing factor. There are two allied problems,—the problem of land tenure, *i.e.*, the legal or customary system under which land is owned, and the problem of land tenancy, *i.e.*, the system under which land is actually cultivated and the product divided between the owner and the cultivator. In a study of the systems of land tenure, we discuss mainly the question of ownership, sale or mortgage of land. Land tenancy is concerned with the study of the question of security under which cultivators hold land and of the division of the product.

The importance of a study of the system of land tenure will be obvious from the following quotation from a report prepared by the UNO on Land Reform. The land tenure system “may reduce the standard of living of the peasant by imposing on him exorbitant rents or high interest rates ; it may deny him the incentive or the opportunity to advance and it may check investment because it offers him no security. It may lead to the prevalence of farms which are too small to be efficient units of production or too large to cultivate intensively.”*

Systems of Land Tenure : The systems of land tenure prevalent in India may be divided into three broad groups, *viz.*, the ryotwari system, the mahalwari system and the zamindari system.

In the *ryotwari system of tenure*, land is held by the cultivators directly under the state. There is no landlord or any other intermediary. Cultivators pay rent directly to the government at rates determined by the latter. They can sub-let their land or transfer or mortgage it. The rates of rent to be paid by the cultivators are revised at the time of settlement operations which take place usually at the end of 30 or 40 years. In

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There is, therefore, no doubt about the fact that the system of permanent settlement has produced obstacles to the progress of the country. Mere reform of the system is not enough. There is no justification, whatsoever, for retaining the system or for preserving 'landlordism'. The Congress have rightly adopted the proposal for the abolition of the zamindari system, and this has already been carried out in almost all states including West Bengal.

EXERCISES

1. Describe the different systems of land tenure prevalent in India and examine their merits and demerits. (Ag. 1939; All. 1935, Cal. 1937, Punj. 1940, 1952)

2. Discuss the relative merits and demerits of the permanent settlement of land revenue in Bengal. Would you like to reform or abolish the system? (Cal. 1947).

3. Examine the relative merits and demerits of the permanent and temporary settlement in India.

4. Describe the system of assessment under (a) the ryotwari settlement, and (b) the mahalwari settlement.

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prevails in India, very few landlords live in the villages and take care to invest money on land improvement. They live in the cities and their agents and officers oppress the tenants in various ways. In West Bengal and other areas where the land revenue has been fixed permanently, the state is losing large amounts of revenue.

The general opinion is in favour of the ryotwari system of tenure. The great merit of this system is that it puts the cultivator in direct touch with the state. Since the cultivator is himself the owner of land, he will have every incentive to cultivate his land properly. There is no landlord to take a share in the product. It is of course true that in some areas owners of large holdings have sub-let their land to tenants, as a result of which the tiller of the soil is not its owner. But this has not become a serious problem as yet. A second advantage of the ryotwari system is that it may encourage the government to invest money on land improvement.

The ryotwari system has, however, a number of defects. In the first place, the periodic revision of land revenue at the time of each settlement operation exercises unsettling effects on the cultivators. The provisions for a revision of land revenue leave a good deal of discretion to the settlement officers. There is necessarily a great deal of guess-work in the process of evaluation of these factors. As a result, assessment of land revenue has often been arbitrary and gave rise to much discontent among the ryots.

The mahalwari system is more or less similar to the ryotwari system in its effects on agricultural operations. In so far as the owners of land actually cultivate it, we are able to secure the benefits of peasant proprietorship. If, however, land is let out to tenants who are the actual cultivators, the system is likely to exercise an adverse effect on agricultural production.

We have yet to find out the ideal system of land tenure under which the conditions of ownership of land will promote instead of hindering agricultural improvement and enable the vast majority of farmers to enjoy a higher standard of living.

Principles of assessment under the ryotwari system: In the ryotwari system, the government fixed the revenue to be paid by each owner of land at the end of a number of years. The system was first introduced in Madras and had generally been

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government While the number of large estates is not very large, the number of Zemindars and intermediaries is not so. In the U P, for example, their number goes up to about 23 lakhs. Most of them owned small estates. The ex-Zemindars will continue to own their home-farms, buildings and other properties like private tanks and enclosures etc. The term, home-farms, generally refers to the land that is registered as *Sir* or *khudhasht* or private land, whether personally cultivated or not. In Madras and the U P, home-farms must be personally cultivated. In addition to the landed estates, the Acts also seek to take over forests, fisheries, waste lands as well as mines and minerals. Private *waqfs* and trusts are also to be taken over. But religious, educational and charitable institutions have been given favourable treatment, and attempts have been made, as far as possible, to keep up their present incomes.

After the estates are taken over, the state governments are to prepare compensation rolls in accordance with the prescribed procedure. It should be noted that under the Indian Constitution, payment of compensation is obligatory whenever any private property is taken over by the state. Provisions for the determination and payment of compensation vary in different states. Rates of compensation are fixed on the basis of 8 or 10 times the net incomes from each estate. This sum is to be paid partly in cash and partly in non-negotiable bonds maturing in 20 to 30 years.

It has been estimated that the total amount of compensation to be paid in seven states viz., Assam, Bihar, Madhya Pradesh, Madras, Orissa, U P, and West Bengal, would be Rs 414 crores. As a result of the abolition of this system, these seven state governments will receive in all an additional annual revenue calculated at Rs 19.52 crores, i.e., about 4.7 per cent of the total compensation.

Effects The abolition of the Zemindari system has freed India's land system from the clutches of a feudal system of land tenure. It is of course true that the mere abolition of zemindaries does not confer any immediate benefits on the tenants. The tenants do not gain any new rights under these acts, nor are their rents reduced in any way. Everywhere they will have to pay rent at the same rate as before, excepting those fortunate few who will be able to buy their holdings. Of course if there are no Zemindars, tenants will not have to pay *abwats* or illegal

government While the number of large estates is not very large, the number of Zemindars and intermediaries is not so. In the U P, for example, their number goes up to about 23 lakhs. Most of them owned small estates The ex-Zemindars will continue to own their home-farms, buildings and other properties like private tanks and enclosures etc The term, home-farms, generally refers to the land that is registered as *Sir* or *khudhasht* or private land, whether personally cultivated or not In Madras and the U P, home-farms must be personally cultivated In addition to the landed estates, the Acts also seek to take over forests, fisheries, waste lands as well as mines and minerals. Private *wagfs* and trusts are also to be taken over But religious, educational and charitable institutions have been given favourable treatment, and attempts have been made, as far as possible, to keep up their present incomes

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of the government is normally fixed at 40 per cent of the net assets. Re-settlement takes place at the end of every 40 years when enhancement of rent is limited to one-third of the previous amount.

Principles of assessment in the system of permanent settlement : In the permanently settled areas, the government recognised the zemindars as the proprietors of the estates held by them, subject to the regular payment of revenue. The system was introduced by Lord Cornwallis in 1793, when the revenue to be paid by each zemindar in respect of the land held by him was fixed at ten-eleventh of the estimated amount of rent received by him. This amount was fixed in perpetuity and was not to be enhanced under any circumstances. The zemindars were, however, free to charge any rent to their tenants. The government laid down only two conditions. First, if the land revenue is not paid by the due date, the estate would be sold in auction for the repayment of the arrears of revenue. Secondly, the government reserved the right to introduce legislation for the protection and welfare of the tenants.

Merits and demerits of Permanent Settlement : The permanent settlement of land revenue was introduced in Bengal, Bihar and Orissa in 1793. At that time, the East India Company was not sure of its hold in India and had to spend large sums of money in financing a number of wars fought in India. The introduction of the system of permanent settlement was thus of great benefit to the company. The company was assured under this system of getting a definite sum of money as land revenue, without bothering about the actual administration of the country. Moreover, zemindars, who were granted full rights of proprietorship, had every reason to support the administration of the company. They became loyal supporters of the British, and this was an important factor in stabilising the British rule in India. Lastly, Lord Cornwallis was actuated by a good motive in introducing this system. He was himself a member of the British landed aristocracy, and thought that the system of landlordism would confer great benefits on this country as well. The zemindars, like the British landlords, would invest money on land improvement, and so would benefit everybody connected with land.

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annual ryotwari demand, 5 pc of the demand on account of establishment charges etc., and $3\frac{1}{3}$ pc on account of maintenance of irrigation works. The rates of compensation vary from $12\frac{1}{2}$ times to 30 times the basic annual sum. It has been estimated that the total amount of compensation to be paid in 7 states would be Rs 414 crores.

Different methods for paying compensation have been adopted in different states. In Bihar and Orissa, compensation may be paid in cash or in bonds or partly in cash and partly in bonds. The bonds will carry interest at $2\frac{1}{2}$ pc with a maturity of 30 years. In Madras, payment is to be made in cash in one or not more than 5 instalments. In the U P, compensation is to be paid in the form of non-negotiable bonds of 40 years' maturity, carrying interest at $2\frac{1}{2}$ pc.

Two questions were debated in connection with the payment of compensation,—the financial implications and the justice of the payment. As regards the financial implications, it has been recognised that compensation is to be paid either in cash or in bonds. The total compensation is estimated to amount to Rs 414 crores. If the whole sum is to be paid in cash, it would be impossible for the states to buy the Zemindaries. Most of the states are running deficit budgets, and their resources would be entirely insufficient for the payment of cash. They might borrow the amount from the Government of India. But the latter has already expressed its inability to give financial assistance to the states for this purpose. A second way to raise cash is for the states to borrow from the money market. But the conditions in the Indian money market are so depressed that it would not be possible to raise such a large sum from the market. So the states have no option but to pay the compensation in bonds. But if ordinary, negotiable bonds are issued, these might be sold by the Zemindars in the market, and such a large-scale sale of bonds would disorganise the market for government securities. It has, therefore, been decided to pay compensation in the form of non-negotiable bonds to all but the small Zemindars.

Mention should be made in this connection of one interesting experiment made by the U P Government to raise funds for the payment of compensation. The tenants were encouraged to become *Bhumidars* or owners of their land by paying 10 times their rent into a separate fund, known as the Zemindari

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ryots. As the growth of population raised the demand for land, zemindars began to charge high rents. In consequence, ryots were rack-rented.

The burden of rents on the ryots increased on account of the growth of sub-infeudation which was a consequence of the system of permanent settlement. With the rise in the level of rents, the margin between the fixed land revenue and the total rent began to increase. This enabled the zemindars to divide their estates and to lease these parts to other men at higher rates of revenue. A large number of middlemen (like Patnidars, Talukdars, Jotdars) grew up between the zemindars and the cultivators. In some cases there were as many as 50 or 60 such intermediaries. As they were mostly rent-receivers, their sole interest lay in increasing the level of rents as much as possible. This meant increasing burden on the ryots.

As has already been stated, one deplorable consequence of the system of permanent settlement was that land became nobody's concern. The zemindar became a mere rent-receiver and ceased to take any interest in land. The large number of middlemen who flourished between the zemindar and the ryot were interested only in collecting as high a rent as the conditions permitted. The cultivator had no money and often no incentive. The government lost all interest as the land revenue was fixed in perpetuity. As a result, nobody felt any responsibility for the best use or improvement of land.

The system of permanent settlement exercised an adverse influence not only on the growth and improvement of agriculture, but also on other aspects of the economic organisation of the country. On account of the fixity of land revenue, purchase of a zemindari estate became a highly profitable proposition. In addition, ownership of an estate conferred great social prestige. Hence men, who possessed surplus money, invested it in the purchase of zemindari estates. The system is, therefore, indirectly responsible for checking the growth of industries by diverting capital from investment in industries where the returns were uncertain, to landed estates where profits were quick and sure.

It has, however, been urged by a number of writers that the system of permanent settlement conferred an important benefit on the country in an indirect way. It has given rise to

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These are, no doubt, desirable changes. But they do not solve the land problem. Time has now come to consider the adoption of schemes of re-organisation so as to increase the yield from land and to secure social justice for all. In the words of the Five-Year Plan, "the land policy should be such as will reduce disparities in wealth and income, eliminate exploitation, provide security for tenant and worker, and finally, promise equality of status and opportunity to different sections of rural population". A satisfactory land policy has two important aspects. It must be such as to ensure the maximum of agricultural production. It must also provide for a sound and broad-based social structure in the rural areas.

Proposals of land reform in the Five-Year Plan: The Planning Commission have correctly stated that the future of land ownership is perhaps the most fundamental issue of national development. Their proposals for land reform may be classified into several heads, (a) intermediaries, (b) large owners, (c) small and middle owners, (d) tenants-at-will, and (e) landless workers.

The first step is the abolition of all intermediary rights including the zamindari system. This has been done in almost all states. This should be followed by the organisation of an efficient system of revenue administration. As the information regarding village records is often inadequate, steps are being taken to undertake a special census of land holdings and cultivation in all states.

With regard to large owners, the Commission have recommended that an upper limit for land may be fixed for (1) resumption of land for personal cultivation and (2) future acquisition. Where land is managed directly by large owners, there should be an upper limit to the amount of land which each individual may hold. This limit should be fixed by each state in the light of several criteria, viz., the amount of land revenue paid, the value of the gross produce of land, value of net produce or income of land. Broadly speaking, an upper limit equal to 3 times a family holding (defined as including that amount of land which a family of average size working with such assistance as is customary in agricultural operations is able to cultivate)

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ABOLITION OF ZEMINDARIES AND THE REFORM OF LAND TENURE

Abolition of Zemindari estates : Whatever the justification of the system in the early days of the East India Company, there is no doubt that the system has produced great obstacles to the progress of the country. It has fixed the revenue from land, involving the state in considerable loss of revenue and has deprived the government of close contact with agricultural conditions. The ryots have suffered in many ways. They lost all customary rights, and were forced to pay an ever-increasing rent, due to some extent, to the pressure of population, and to the growth of a large number of middlemen between the zemindar and the ryot. The country has also suffered materially. On account of this system, land has become nobody's concern. Cultivators, being poor, have no money to invest. Zemindars ceased to invest and the government did not feel any desire to invest in land. Lastly, the system had been responsible for diverting surplus capital from investment in industries where the prospects of profits were uncertain into the purchase of landed estates. It has, therefore, indirectly put obstacles to the development of industries.

The general opinion of the country is rightly in favour of the abolition of the Zemindari System. It was a part of the Election Programme of the Congress, and appropriate legislation has already been passed in almost all states for the abolition of the system. Out of 9 Part A states, six, namely, Madras, the U.P., Bihar, Orissa, Assam and Madhya Pradesh have passed the necessary legislation. In West Bengal, the Government has passed an Act to this effect in 1953. Among Part B States, Hyderabad, Madhya Bharat and Kashmir have taken steps to pass the necessary legislation.

The Zemindari Abolition Acts : All these Acts for the abolition of the Zemindari System follow, more or less, the same pattern. The government is authorised to fix a particular date, after which the rights of landlords, malguzars, talukdars, jagirdars, patnidars and all other tenure-holders will vest in the

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Bhoodan or Land gift movement The "Bhoodan Yajna" movement has been started by Acharya Vinoba Bhave, a disciple of Mahatma Gandhi to find a peaceful solution of the problem of landless labourers. The main idea behind the movement is to collect gifts of land from land owners by an appeal to their sense of justice and social conscience. The land thus collected is distributed among the landless workers. They are also to be supplied with other instruments of cultivation so that they can become owners of land and start cultivation on their own.

The movement was started in 1951 and since then Acharya has constantly been on walking tours in villages for collecting land. He has announced his ideal to be the collection of 5 crore acres of land by 1957 so as to provide 5 acres of land for each family of agricultural workers. The movement is being helped by the State Governments in various ways, and some State Governments have passed legislation to facilitate gifts of land and distribution of such land among landless workers.

It has been claimed in favour of the movement that the bhoodan movement would not only solve the land problem but also various social and personal problems of individuals. If properly carried out, it will make an important contribution to the solution of the problem of landless workers. Perhaps more important is the moral side of the movement. It aims at reforming the life of the people, teaches them to love their neighbours and to bring about their own moral regeneration. Apart from this moral value, the movement has no doubt some special importance. A gift of land to the landless workers removes an important source of conflict in the rural areas and provides such workers with an opportunity to become useful members of the society. While the potentialities of the movement are thus of great significance, it has to be supplemented by other reforms in the rural organisation.

Tenancy Legislation: In the zamindari areas and to a large extent in the ryotwari areas, owners of land have let out either the whole or part of their holdings to tenants who actually carry on cultivation. The pressure of population on land and the absence of other occupations in the rural areas have led

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Though there may not be any immediate gain for the tenants, they are likely to be benefitted in the future. One result of the abolition of zemindaries will be the simplification of the tenancy system. The tenants will be brought directly in touch with the government and will gain an independent status. There will be an important psychological gain because of the fact that the domination of one class over others will cease. With the state as landlord the tenants will enjoy greater security of tenure.

The problem of payment of compensation : The question of the payment of compensation has given rise to a good deal of controversy. Since the Indian constitution makes the payment of compensation obligatory, all the Zemindari Abolition Acts have provided for the payment of compensation. The basis for the determination of compensation is, of course, *different in different states*. In Assam, Bihar, Madhya Pradesh and Orissa, the basis is the 'net income' from each Zemindari ; in the U. P., it is the 'net assets', and in Madras, 'the basic annual sum'. The basis of net income and net assets is the same, and is to be determined by deducting from the gross income of the Zemindars such sums like land revenue, cess, agricultural income tax, cost of management and costs of works of benefit to the ryots etc. The cost of management is to be fixed on different principles in different states. The rates of compensation including rehabilitation grants vary from 8 times (in the case of estates of large income) to 28 times (in the case of estates of lowest incomes) the annual assets in the U.P., from 3 times to 20 times in Bihar and Orissa ; and from 4 to 15 times in Assam. In these states, in calculating the net income, the present income from the estate is taken into consideration. But in Madras, the amount of compensation was to be related, not to the present income, but to what 25 p.c. of the land revenue demand would be after the ryotwari system was introduced in those areas. The 'basic annual sum' is to be determined after deducting from one-third of the

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tenure is permanent and heritable, and he can be ejected only on specified grounds. In case of ordinary tenants, their tenure has been fixed at 10 years at a time, and if the tenant is allowed to remain in possession after this period, his tenancy will be deemed to have been extended for another 10 years.

These provisions of the Bombay Act have been followed in Hyderabad, Madhya Bharat, Saurashtra and other states. The Punjab Tenants (Security of Tenure) Act of 1950 ensures security from ejection for at least five years. The tenants of reserved land will have the right of re-instatement if, after their ejection, the landlord fails to cultivate land personally.

These tenancy Acts have also sought to reduce the burden of rents. In Bombay, the maximum rent that can be recovered from a tenant has been fixed at one-fourth of the total produce in the case of irrigated lands and one-third in the case of other lands. The government have powers to lower these limits for any area. In Orissa, the Tenants' Protection Act of 1948 fixes the maximum rents of occupancy tenants at $1/6$ th to $1/3$ th of the gross produce or value thereof. In Madras, the level of rents paid in Zemindari areas have been brought down to the level prevailing in other areas.

Thus under recent Acts, tenants enjoy the following rights, viz., reasonable security of tenure, payment of fair rents, right to buy their holdings at reasonable prices determined by tribunals (as in Bombay or Hyderabad), or as on payment of a certain multiple of rent or land revenue (as in Pepsu or U P.).

As regards crop-sharing tenants, the Assam Adhars' Protection and Regulation Act of 1949 has sought to grant occupancy rights on the *adhar* unless he gives up the land or is asked by the Revenue officer to do so on certain definite grounds. The landlord will get back seed grains if he supplied them and also one-third of the produce if he has supplied plough and cattle. In other cases, he will get only one-fourth of the produce. In West Bengal, the Government have set up Conciliation Boards to settle disputes between the *bargadars* and owners over rent, ejection, supply of seeds etc. In the absence of any agreement, the seed will be taken out of the produce and given to the party that supplied it. The landlord and the tenant will each get one-third of the total produce. The remaining one-third

tenure is permanent and heritable, and he can be ejected only on specified grounds. In case of ordinary tenants, their tenure has been fixed at 10 years at a time, and if the tenant is allowed to remain in possession after this period, his tenancy will be deemed to have been extended for another 10 years.

These provisions of the Bombay Act have been followed in Hyderabad, Madhya Bharat, Saurashtra and other states. The Punjab Tenants (Security of Tenure) Act of 1950 ensures security from ejection for at least five years. The tenants of reserved land will have the right of re-instatement if, after their ejection, the landlord fails to cultivate land personally.

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Abolition Fund. A *Blumidar* would enjoy transferable rights over their land and would have to pay 50 p.c. of their existing rent as land revenue to the government till the next settlement which would take place after 40 years. The same method has been adopted in Madhya Pradesh. But in spite of intense propaganda, the U.P. Government succeeded in collecting only Rs. 32 crores.

The justice of any payment of compensation has been attacked from many sides. A large section of the people have regarded the payment of any compensation as being unnecessary on account of the fact that landlords are mere functionless intermediaries. The majority of landlords have exploited and rack-rented the tenants for such a long time that they do not deserve any compensation. Others point to the fact that many landlords had played a very reactionary role in the movement for the freedom of our country. The payment of proper compensation would only perpetuate the heavy financial burden of the Zemindari system. While there is a great force in these arguments, it should also be remembered at the same time that many of the present-day landlords are individuals who have made genuine investments in land for which they deserve some compensation. Land is but one form of property, and it is a wrong principle to penalise one form of investment. The great bulk of the middle class people of our country depend to a great extent on the income from Zemindari estates. It is only an act of simple humanity to pay some compensation in order to enable them to start on a new career of usefulness.

The problem of land reforms: The abolition of the Zemindari System is only a beginning. It has resulted in the removal of an important obstacle to the introduction of land reforms. The abolition of the Zemindari System will not solve all the problems of land tenure. The Zemindari Abolition Acts have introduced certain changes in the system of land tenure. They have often resulted in the simplification of the tenancy system. In the place of a large variety of rights and tenures, there will now be a comparatively small number of tenants and owners. These Acts have enlarged the number of tenants who would be able to acquire land, and thus become landowners. Moreover, the tenants have been brought into direct relationship with the state. The state now occupies the position of the

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CO-OPERATIVE MOVEMENT

Meaning of Co-operation : In a broad sense co-operation means the mutual assistance of a number of people or of agents for performing a particular task. In its narrow sense it is used to describe a form of business organisation which is not carried on for the purpose of earning profits, but which is actuated by the spirit of mutual service. In a competitive economy, producers are influenced mainly by the profit motive. Their ideal is to earn the maximum profits for themselves. In a co-operative society, the members follow some other ideal. Such a society is generally formed by people who are poor for the purpose of promoting their common material and moral advantage. Individually each member may be unable to achieve some end by his own efforts. So he combines with others to secure this common economic end. The association is entirely on a voluntary basis, and each member possesses equal rights and responsibilities in the society.

A co-operative society may be formed for a variety of purposes. It may be formed by ordinary consumers for the purpose of conducting retail trade. This is known as the consumers' co-operative society or stores. It may also be formed for the purpose of producing a particular commodity or commodities. This is producers' co-operation. Thirdly, a co-operative society may be organised for the wholesale purchase of raw materials or instruments of production required by the members; or for the bulk sale of commodities produced by the members. Lastly, a co-operative society may be formed for the purpose of raising funds and lending to the members, engaged in agriculture, industry or salaried occupations. This is the last form which predominates in India.

History of the movement in India : The history of the movement can be traced back to the last quarter of the 19th century when a number of co-operative credit societies was started in the Punjab and the U P for the purpose of granting loans to cultivators. The movement was looked upon as providing a means for the solution of the problem of rural

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may be regarded as a fair limit. Land in excess of this upper limit should be taken away from existing owners and redistributed among others. The fixing of such an upper limit has been justified mainly on grounds of social justice. As excessive concentration of wealth is not considered desirable, so also concentration of landed property above a certain limit is also undesirable, especially in view of the shortage of land as compared to the rural population. But against this should be set the consideration that such a step may hamper large-scale farming with up-to-date appliances, and so lead to a decline in agricultural efficiency.

As regards small and middle owners, the general aim should be to encourage and assist them to develop their production. The small owners should be encouraged to consolidate their holdings and to organise themselves in co-operatives.

The tenants-at-will should be given security of tenure, and should be asked to pay fair rents. In fixing fair rents, the main consideration should be that, having regard to the expenses of *cultivation and other risks, a fair wage remains for the cultivators*. As far as possible, rents should be reduced to one-fourth or one-fifth of the produce.

As regards the landless workers, the problem is, of course, difficult of solution. The fixing of an upper limit to land holding and the consequent redistribution of excess land among these classes may bring some relief. But this will touch only the fringe of the problem. The Commission expressed the opinion that Acharya Vinoba Bhave's land gift movement should be supported through special assistance, and such gifts should be made a permanent feature of rural development. Blocks of newly reclaimed land as also cultivable waste land should be set apart for the settlement of landless workers on co-operative lines.

The abolition of intermediaries and the fixing of an upper limit to land-holdings are negative achievements. They do not contribute much to promote agricultural development. A real and lasting solution can only come through the organisation of co-operative farming and ultimately of co-operative village management in which land and other resources of a village can be managed and developed so as to increase and diversify

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After this Act, the movement began to spread out into many directions, and in 1914, the government appointed a committee, known as the MacLagan Committee, to review the progress achieved by the movement. That committee made a number of useful recommendations to increase the efficiency of the movement. Under the Government of India Act of 1919, co-operation became a Provincial subject, and was transferred to the control of ministers. Many of the Provinces passed separate Acts to guide the movement in their respective areas, and the number of societies increased from 577 thousand in 1921-25 to 1169 thousand in 1936-40. But the movement passed through considerable difficulties during the Great Depression of the thirties. On account of the serious fall in prices, most of the borrowers became unable to repay their loans on due dates. As a result, overdues became excessive in many societies. The World War II, however, led to some improvement by raising prices. Overdues decreased, and the working capital of the societies increased from Rs. 946 crores in 1931-35 to Rs. 188.7 crores in 1946-50.

Present position of the movement: The present position of the movement will be obvious from the statistics regarding the number and capital of the societies. In 1950-51, there were 181.19 thousand co-operative societies with 137.15 lakh members and a total working capital of Rs. 275.85 crores. The vast majority of these societies are of course credit societies (about 81 p.c.), and about 83 p.c. of the credit societies are agricultural societies. Thus in spite of the spread of non-credit co-operation, credit societies are predominant in the movement.

Apart from this general expansion, the movement has spread into several walks of life, which were perhaps no more than touched before. It is now playing an important part in the rehabilitation of displaced persons and in the Grow-More-Food campaigns. Through the organisation of housing, industrial and farming societies, a number of displaced persons have been settled in colonies and provided with gainful employment.

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The central aim of these tenancy laws, which varied in details in different states, was to ensure fixity of tenure and fair rents for the vast majority of tenants. Tenants were generally divided into two groups, *viz.*, occupancy tenants and non-occupancy tenants. Occupancy tenants were granted the right to occupy the land held by them permanently subject to the payment of rent. Their holdings are heritable and transferable. Though the rent paid by them is fixed by custom and usage, it can be increased only under certain given conditions and at a given rate. The position of non-occupancy tenants is of course inferior. They do not enjoy the same security of tenure, and their holdings may not be transferable.

In addition to these two groups of tenants, there is a third group known as *bargadars*, *adhiars* or crop-sharing tenants. These are tenants at will and cultivate land on a crop-sharing basis, instead of on the basis of fixed money rent. They do not enjoy any security of tenure, though they are usually left undisturbed so long as they continue to pay their high rents. Attempts are being made in recent years to confer some rights on these people.

In recent years a series of Acts have been passed in different states in respect of the tenants. The general policy has been to enable tenants to become owners of land held by them. The Bombay Tenancy and Agricultural Lands Act of 1948 seeks to confer permanent tenancy rights on certain groups of tenants and to give them the status of protected tenants. Tenants who have cultivated land personally for 6 years prior to January 1938 or January 1945 will be recognised as protected tenants. The burden of proof, whether a tenant is protected or not, lies on the landlord. A protected tenant has been given the right (a) to purchase a holding of a maximum size of 50 acres at reasonable prices, (b) to exchange his holding with another protected tenant in the same village, (c) to erect farm-houses and (d) to get compensation for improvements made by him on eviction. His

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To finance these primary societies, a large number of central co-operative banks have been established mainly at the district or taluka headquarters. At the head of these central banks stand the State Co-operative Bank whose main business is to meet the financial needs of the central banks.

Agricultural Co-operative Credit Societies: Certain principles are followed in the organisation of these societies. These societies are highly democratic in organisation, and the members are expected to know each other intimately. As far as possible, members render honorary services to the society and transactions are generally confined to members. This type of society can be formed by ten or more persons who reside in a village or part of a village. The liability of the members is unlimited. The members form the General Committee of the Society and elect a Managing Committee from among themselves. - The Managing Committee is the executive organisation of the Society, and conducts its day-to-day affairs, subject to the approval of the General Committee. The General Committee may also appoint a paid Secretary for the efficient conduct of its business.

The working capital of the Society is derived from (a) the entrance fees paid by the members at the time of admission, (b) the share capital subscribed by the members, (c) deposits from members and non-members, and (d) loans and deposits from other societies, central co-operative banks and the government. Out of these funds, loans are granted only to the members for such productive purposes like current agricultural expenses, as for the purchase of seeds, implements and making permanent improvements to land. Loans are also given to enable members to meet such unproductive expenditure like marriage or *snadh* expenses, repayment of old debts etc. Loans are usually given against the personal security of the borrowers and also against

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Non-agricultural non-credit societies: There are various types of these societies, such as co-operative consumers' stores, co-operative housing societies, co-operative production societies etc.

(1) *Consumers' co-operative stores* are organised for the purchase and retail sale of the consumers' goods among the members. Members purchase shares in the society and are expected to buy all their requirements of consumers' goods from the stores. These goods are sold at the current retail prices and at the end of the year each member receives a dividend depending on the total value of his purchases from the stores. These types of societies occupy a dominant position in the co-operative movement in Great Britain. But they are not important in India. There were in all 8949 consumers' stores in India with a membership of 2155.4 thousand members in 1949-50. Moreover, except in Madras and to some extent in Bombay and Assam, the movement has not spread to include the wholesale trade.

This movement has achieved some progress in Madras, where it has spread even into rural areas. This state has also organised

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indebtedness. At about this time the Madras government sent one of their officials, Sir Frederick Nicholson, to study the movement in Germany. Nicholson submitted his report in 1895-97, in which he advocated the establishment of co-operative societies on the Raiffeisen model. The Famine commission of 1901 also pointed to the need for organising such societies in the rural areas.. Accordingly, the Government of India set up a committee in 1901 to report on the establishment of co-operative societies in India, and finally the Co-operative Credit Societies Act was passed in 1904. This Act laid the foundation of the co-operative movement in India.

The Co-operative Credit Societies Act provided only for the formation of credit societies for the grant of loans. These societies were divided into two types, rural and urban. Rural credit societies were to be organised on the Raiffeisen model. The liability of each member was to be unlimited ; there was to be no share capital ; and loans were to be granted only to members and only for productive purposes. Urban credit societies were to be organised on the Schulze-Delitsch model. They were to issue shares and the liability of the members was to be limited.

A large number of co-operative credit societies were started after the Act and the number of societies increased to about 10,000 by the end of the year 1912. But a number of difficulties were found as a result of the working of the Act. It was considered necessary to start non-credit societies, which was not possible under the Act. Even with regard to credit societies, there were certain defects. The division of societies into rural and urban types was found to be unscientific. Moreover, there was no provision in the Act for the establishment of central societies for supervising the work of primary societies and for supplying funds to them. Lastly, more liberal provisions were found necessary for the payment of dividend.

To remedy these difficulties, another Act, the Co-operative Societies Act, was passed in 1912. It provided for the establishment of non-credit co-operative societies such as sale societies, purchase societies, housing societies etc. Secondly, it laid down the organisation of central societies like supervising and guaranteeing unions, central and state co-operative banks. Thirdly, it abolished the distinction between rural and urban

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the hand-loom industry Madras has the largest number of weavers' societies (941 societies with 149,393 members and 134,653 loans), followed by West Bengal (939 societies with 63,186 members). The U.P. has 569 societies and Bombay 354 societies. Madras has organised an apex organisation, the Madras Hand-loom Weavers' Provincial Co-operative Society, with a working capital of Rs 63.77 lakhs. This society distributes yarn to the primary societies and undertakes the marketing of cloth, and itself owns six collective weaving centres, five hand-loom factories, one printing factory and seven dye factories.

Similar societies have also been organised for other small-scale industries. In Bombay, there were 538 such societies with a total working capital and sales of Rs 67.05 lakhs and Rs 57.92 lakhs respectively. These societies have been organised among tanning and leather workers, forest labourers and oil-men, rope-makers and bamboo workers. In Madras, such societies have been organised among metal workers, leather workers, potters and rope-makers.

The organisation of this type of society is expected to help the rehabilitation of small-scale industries on modern lines. Given adequate financial help, staff for management and training, implements, these will enable us to utilise the age-long skill of our artisans.

(4) *Other forms of non-credit co-operation* - In addition to the societies described above, co-operation has been employed in improving the living conditions of agricultural and industrial labour through the formation of labour contract societies, forest labourers' societies, transport societies and co-operative workshops. The chief aim of the labour contract societies is to secure employment for their members by taking up contracts for the construction and repair of roads, culverts, buildings etc. Besides these, women's co-operatives have been organised for promoting thrift and developing handicrafts and home industries particularly suited to their genius, such as hosiery, knitting, printing of cloth, production of ready-made garments, leather works etc. A few such societies run nursery schools as well as spinning and tailoring classes. There are also (a) better living societies whose main work include village sanitation, running of free schools etc., (b) medical aid and public health societies,

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State-wise distribution: An unfortunate feature of the movement is its uneven development. For instance, out of a total of 115462 primary agricultural credit societies, 45.4 p.c. are concentrated in the 3 states of Bombay, Madras and the U. P. In Madras and Bombay the movement is well-developed. In 1950-51, rural credit societies covered 58.3 p.c. of the villages in the state. Moreover, out of a total number of 286 primary land mortgage banks, as many as 129 were in Madras. On the non-credit side also, Madras and Bombay have made commendable progress in many spheres such as consumers' stores, housing, milk supply, weavers' co-operative societies etc.

As regards other states, U. P., Madhya Pradesh, Bihar, Orissa, Mysore, Travancore, Cochin and Hyderabad, the movement has made some progress in various spheres, specially after World War II. But the movement is not so strong or wide-spread as in Madras and Bombay.

In a large number of Part B and Part C states, viz., Himachal Pradesh, Madhya Bharat, Manipur, Pepsu, Rajasthan and Saurashtra, the movement is relatively undeveloped.

The two states of the Punjab and West Bengal stand in a separate category. Before the partition, the Punjab had a fairly developed co-operative structure. But the partition of these states disrupted this structure. In undivided Bengal, the co-operative movement, though widespread, was very badly affected by the depression of the thirties, and the position became more difficult as large funds of the state co-operative banks became frozen in East Bengal. In Assam also, the movement was hit hard by the depression from which it had not been able to emerge. So at present there is a moribund credit structure in that state.

Structure of the Co-operative movement: The base of the movement consists of the primary co-operative societies.

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as the pure type, in which only co-operative societies can become members. The latter is called the mixed type. Most of the central banks are of the second type.

The main function of these banks is to grant loans to the primary co-operative societies. They also help the primary societies in other ways. A primary society may be temporarily in possession of surplus funds which it finds difficult to invest. It can deposit these funds with the central bank and earn some interest. The central bank lends these funds to other primary societies which may be in need of funds. In this way central banks help in adjusting and balancing the surpluses and deficiencies of working capital of the primary societies, and so secure the best utilisation of the funds. Central co-operative banks also perform all kinds of ordinary banking business like the acceptance of deposits from the public, remittance of funds, collection of bills, cheques, and hundis etc. In 1949-50, these banks received deposits amounting to Rs. 35 crores, the major portion of which came from private individuals, and these constituted nearly 70 p.c. of the total working capital of these banks. Some of them also grant advances to private individuals. In addition, a large number of these banks have undertaken non-credit activities of varying types. For example, in Madras, they finance co-operatives for the procurement and distribution of food-grains, fertilisers, iron and steel etc. Some of them are also engaged in the retail distribution of foodstuffs and other essential articles like sugar, cloth, kerosene oil etc. In 1949-50, there were in all 498 central co-operative banks with a total working capital of Rs. 498 crores. They grant loans worth Rs. 66 crores to primary societies and Rs. 86 crores to individuals.

The report of the Reserve Bank of India makes a number of suggestions for improving and strengthening the organisation of central co-operative banks. Firstly, the share capital structure of these banks is weak, being only 71 p.c. of the total working capital. The reserve funds are also comparatively inadequate. These banks should, therefore, try to increase the amount of share capital and to strengthen the reserve fund. They should carry at least one-third of the profits to the reserve fund until the latter equals the paid-up capital. Secondly, they should make an intensive effort to attract more deposits, especially in the rural areas. Thirdly, they should take steps to decrease their commercial banking activities, and to reduce the rates of interest.

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Every society is required to build up a reserve fund. In societies with no share capital, all profits are taken to the reserve fund. In societies with share capital, at least 25 p.c. of the profits are to be taken to the reserve fund before any dividend can be declared. The society may spend 10 p.c. of its profits for charitable purposes, subject to the sanction of the Registrar. The accounts of every society are audited by officers appointed by the Registrar. The societies have been granted certain special privileges like exemption from stamp duty, registration fees or income tax. They enjoy a prior claim on over other creditors with the exception of the government.

These societies form the backbone of the whole movement. About 67 p.c. of the total number of co-operative societies consist of primary agricultural credit societies.

Agricultural Non-credit Societies: These societies have been organised in various directions. There are co-operative purchase and sale societies, co-operative production and sale societies, co-operative irrigation societies, cattle insurance societies, co-operative consolidation of holdings societies, co-operative farming societies, co-operative better living societies etc. The organisation of these societies is similar to that of the credit societies, except that their liability is limited.

The most important group among non-credit societies is constituted by the co-operative marketing societies. These have been organised mainly for the sale of a single commodity produced by the members, such as the cotton sale societies of Bombay, sugar-cane sale societies in Bihar and the U.P. and fruit-growers' societies in Bombay. An account of the working of these societies has already been given in a former chapter ?

Non-agricultural credit societies : These are organised on the Schulze-Delitsch model with limited liability and share capital. These have been established to cater to the needs of various classes of people. The most prominent among them are the *urban banks* which number 916 with a working capital of Rs. 24.36 crores in 1949-50. These banks follow modern methods of banking and accept deposits from the public. These banks have made good progress in the states of Bombay, Madras, Mysore, West Bengal and Hyderabad. There are also *Salary*

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State aid and control and the co-operative movement: The State in India has played an important role in organising and developing the co-operative movement. In fact, the movement may truly be regarded as predominantly state-sponsored. The aid given by the various State Governments may be classified as follows:—(1) Organisation of the movement through the co-operative departments. The birth and working of all co-operative societies are supervised by the co-operative department in each state. (2) Financial grants to the societies. The State Governments grant subsidies to the societies for several purposes such as meeting of establishment charges including staff, purchasing of equipment, agricultural implements etc. Broadly speaking, subsidies are given in the early stages of the working of societies with a view to help them to establish themselves firmly. In Madras and Bombay, the governments have adopted a scheme of subsidies with the object of cheapening credit to cultivators. In addition, the State Governments grant loans to the state co-operative banks. (3) Another way in which governments have been helping the movement is through the provision of guarantees of the principal and interest payments on the debentures of land mortgage banks. (4) The governments have also granted certain special concessions and privileges, such as exemption from income tax, stamp duty, registration fees, free remittance facilities etc.

The State Governments exercise control over the working of the societies through the conduct of auditing and inspection and supervision. The audit of societies is carried on each year by a separate staff maintained by the co-operative department. Inspection and supervision of societies are also carried on by the staff of the co-operative department.

General picture of the co-operative movement: It is now possible to get a general picture about the organisation of the co-operative movement in India. The base of the whole organisation is the primary society. Most of them are single-purpose societies, designed to meet particular needs of the people of small means. The vast majority of these societies have been set up to serve the agriculturists, and more than 70 p.c. of these are concerned with the grant of loans. There has been some development in regard to the organisation of consumers' co-operative

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a number of wholesale stores, whose financial position is generally sound. A special mention should be made of the progress and working of the school and college students' stores, whose number stood at 345 with a membership of 21186 students, 6203 teachers and a paid-up share capital of Rs. 81,618. In other states, the consumers' stores movement gained some impetus since the World War II as the various governments encouraged their formation with a view to secure a better distribution of the controlled and rationed articles. It should be noted that besides the purely consumers' stores, numerous societies of other types, particularly credit and multi-purpose societies, have also undertaken the functions of the distribution of consumers' goods. Thus controls largely influenced the success of the stores movement in all states, and most of them are facing difficulties with the removal of controls.

(2) *Co-operative Housing Societies* : The years after the Second World War have witnessed considerable development of co-operative housing societies, though there were a few such societies working in some of the states. In recent years housing accommodation has become very scarce particularly in the big cities and building construction was very much restricted on account of the abnormal rise in building costs. Under such conditions, co-operative housing offers several advantages especially for the poorer sections of the population. The organisation of these societies is proceeding at a rapid pace in several states. For instance, in Madras, the number of such societies increased from 122 in 1939-40 to 280 in 1949-50. In Bombay, the number has similarly shot up from 99 to 769 during the same decade. In West Bengal and Mysore, their number has increased from 49 and 37 to 103 and 93 during the years 1948 and 1950. In Madras, these societies constructed 751 houses in 1949-50, the number increasing from 79 houses in 1947-48 to this figure. Similarly, in Bombay, the number of buildings constructed have increased from 158 in 1947-48 to 329 in 1949-50. The main difficulty faced by these societies is the lack of adequate finance. Governments in several states help these societies by the grant of loans.

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Fifthly, the remarkable growth of the movement has led to full utilisation of all available resources. Prior to 1939, the state and central banks had to face considerable difficulties on account of surplus funds in their hand. This has been reversed, and at present these banks have to borrow heavily to meet the demands of the primary societies.

Some problems of the co-operative movement: We have so far discussed the main developments in the field of co-operation in India. There are three important features which should be treated in detail. They are —(a) the organisation of multi-purpose societies; (b) financial accommodation from the Reserve Bank to the co-operative movement, and (c) the question of re-organisation of the movement.

(a) **Single vs. multi-purpose societies:** Until a few years ago, co-operative societies were organised for a single purpose, viz., to supply credit, or to market the produce, or to irrigate the land etc. Since 1937, the Reserve Bank of India has been vigorously advocating the need for organising multi-purpose societies. That is, instead of organising different societies to serve different purposes (co-operative credit society for loans, a co-operative sale society for marketing, a co-operative purchase society for the purchase of essential materials etc.), a single society should be set up to deal with all the needs of the cultivators. Such a multi-purpose society will grant loans to the members, buy good seeds, manure and implements for them, sell their produce, help them to consolidate their holdings and to irrigate their land, and to introduce other better-living measures.

Many advantages have been claimed in favour of such a multi-purpose society as against a single-purpose society. In the first place, there is a dearth of properly qualified men in the villages for the efficient conduct of so many single societies. Secondly, efficiency of the movement will also suffer because of another factor. To take an example, it is being increasingly felt that unless the supply of credit is linked up with the marketing of produce, it will not be possible to have fully efficient credit

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some of which undertake management of dispensaries, selling medicines to the poor free of charge or at concessional rates ; (e) educational societies, organised to help the spread of education mostly in Bombay. In recent years co-operation has also been called upon to play its part in rehabilitating displaced persons and ex-servicemen.

(5) *Co-operative Insurance* : These societies undertake all kinds of insurance business on a co-operative basis. In Bombay, there were 5 life insurance societies, one fire and general insurance society and one motor insurance society in 1949-50. In West Bengal, there were 10 life insurance societies, whose total business in force amounted to Rs. 2.86 crores in 1949-50. Mention should be made of the Indian Postal and Co-operative Insurance Society Ltd., whose membership has been thrown open to all the employees of the Union and State Government throughout India. Unfortunately adequate attention has not been given to the organisation of this type of societies.

Higher financing and supervising agencies : So far we have discussed the functioning of the primary co-operative societies. A number of institutions have also been set-up to supervise and finance these societies. These are Unions, Central Co-operative banks and State Co-operative banks.

(a) *Unions* : This type of society is formed by uniting a number of primary societies into one organisation. Membership is open only to primary societies, and the actual management is carried on by a committee representing the member-societies. There are guaranteeing unions whose main function is to guarantee the loans taken by member-societies from the central co-operative banks. Supervising unions undertake the supervision of the member-societies and so serve as a link between them and the central co-operative banks.

(b) *Central Co-operative Banks* : These banks have been organised mainly for the purpose of providing loans to the primary societies. As primary societies are formed mostly by poor people, their financial resources are seldom adequate. Hence there was a need for setting up special institutions for the supply of funds to these societies. The central co-operative banks have been organised to meet this need. They may be formed exclusively by primary societies, or by both primary societies and ordinary individuals. The former type is known

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(b) Reserve Bank of India and the co-operative banks: The part played by the Reserve Bank of India in providing loans to the State Co-operative Banks and land mortgagage banks at concessional rates has already been discussed in another chapter.

Achievements of the movement: The co-operative movement has conferred great benefits upon the country. In the first place, it supplies quite a large amount of capital to the members at reasonable rates of interest. Moreover, the benefits of the movement can not be judged only by looking to the amount of capital lent by the societies. Where the co-operative movement has been strongly established, the competition of the societies has forced the money-lenders to lower the rates of interest. It has been estimated that this fall in interest rates has resulted in a saving of about one crore of rupees. *Secondly*, the movement has made important contributions towards the development of banking facilities in the rural areas. The agricultural credit societies received deposits worth Rs 3.92 crores in 1949-50, and the central and state banks collected Rs 56.15 crores. Thus these societies have encouraged habits of saving and investment. *Thirdly*, these societies have helped considerably in discouraging borrowing for consumption purposes—as it is well-known that they prefer borrowing for productive purposes.

Fourthly, the movement has thus been of great advantage to the premier industry of the country and to some of the cottage industries. By popularising the use of better seeds, cheap manures, and better implements, by consolidating scattered holdings into large plots, by enabling the cultivators to get higher prices for their produce through improved marketing, and in various other ways, the co-operative societies are playing an important part in the improvement of agriculture.

Finally, the benefits of the movement can not be measured only in economic terms. The moral and social benefits are no less obvious. Where the co-operative movement is strong, there has taken place a reduction in litigation and extravagance, drunkenness and gambling. In their place will be found industry, self-reliance and straight-dealing, education and arbitration societies, thrift, self-help and mutual help. It has increased the desire for education among the illiterate villagers. A large number of societies are spending a part of their incomes for the maintenance of educational and charitable institutions.

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(c) *State Co-operative Banks* : These are situated at the capital of the state, and have been organised to finance and co-ordinate the operations of the central co-operative banks. Of the 27 states in the Indian Union, 14 have organised such a bank. Their organisation varies in different states. In some of them, membership is open both to the co-operative societies and to private individuals. In others, these banks are of a pure type, membership being open only to co-operative institutions. Their main function is to grant loans to the central banks, and where there are no central banks, to primary societies. Secondly, they also help in the adjustment and balancing of the surpluses and deficiencies of the central banks. A central bank having surplus funds deposit them with the state co-operative bank, which lends them to another central bank suffering from a shortage of funds. In addition, they perform all kinds of ordinary banking business like the acceptance of deposits, collection of bills etc. Their deposits amounted to Rs. 21.16 crores in 1949-50. They have also borrowed from the State Governments, the Reserve Bank of India, the Imperial Bank of India and other sources. The Reserve Bank has been playing an increasing role in providing loans to the co-operative movement through the state co-operative banks at comparatively low rates of interest.

The growth and development of these banks have not been uniform in different states. While there are state co-operative banks which are extremely sound financially, there are others which are financially weak and are in continual need of assistance from the State Government. There are state banks which are big organisations, while there are others that are smaller than even some of the central co-operative banks. Some State Co-operative banks work under a constitution designed mainly to allow them to function as semi-trading co-operatives, while some others have concentrated chiefly on commercial business.

Co-operation and long-term credit : The co-operative principle has also been adopted in the organisation of institutions designed to supply long-term loans to the agriculturists. A member of land mortgage banks have been organised on the co-operative basis, though the mixed type predominates among

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Suggestions for re-organisation: It is generally agreed that the co-operative banks provide the most important instrument for the supply of rural credit. In India, the co-operative movement is comparatively weak in many of the states. The rate of interest paid by the members of the co-operative credit societies seems to be high in some of the states. Hence there is an urgent need for a more balanced, strong and well-ordered development of the movement so that agriculturists would be able to obtain finance at reasonably cheap rates of interest. We are going to point out an outline of the broad pattern of re-organisation suggested by the Reserve Bank of India.

Since the basis of the movement is formed by the primary societies, it is necessary, first of all, to take suitable steps to strengthen their organisation. It has been suggested that (a) societies which cannot be revived should be liquidated, thereby eliminating inefficient units, (b) small societies are to be amalgamated in a compact area into economic units, wherever possible, (c) and attempt is to be made to convert credit societies into multi-purpose units.

Secondly, attention should be given to reform the central co-operative banks. Quite a large number of these banks are small, uneconomic and financially weak. Their paid-up capital and reserves are inadequate, and they have not been able to attract deposits. They are also not in a position to employ well-qualified and trained staff. Uneconomic or financially weak central banks should be amalgamated into larger units, whenever possible. They should try to mobilise local savings to a much greater extent than they are doing now.

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stores, and producers' co-operation or industrial co-operatives. But the proportion of these societies is comparatively small.

To finance these primary societies, a chain of other institutions has been set-up. There are central co-operative banks or banking unions, which grant loans to the primary societies and supervise their operations. These central banks have again been federated into the state co-operative bank, which is the apex of the whole movement. The state co-operative bank and the central banks attract funds from the money market and invest them in financing the needs of these societies. The state co-operative banks enjoy important borrowing facilities from the Reserve Bank of India, the Imperial Bank of India and other institutions in the money market and thus provide a channel through which the resources of the money market flow to feed the movement.

Some recent trends: Certain trends are noticable if one studies the growth of the movement in recent years.

On the whole the progress of the movement has been substantial, especially in the years since the achievement of independence. The total number of societies declined as a result of the partition of the country. But since then so much progress has been made that the number, membership and working capital of these societies increased during 1949-50 by 5 p.c., 37 p.c., and 42 p.c., respectively over the 1945-46 figures. Thus at the present moment, the total number of societies in the Indian Union is more than they were in undivided India.

A second tendency is towards a higher rate of development in relation to non-agricultural societies. The proportion of non-agricultural societies in the total number of primary societies has increased from 12.8 p.c. in 1938-39 to 16.07 p.c. in 1949-50.

Thirdly, the proportion of credit societies to the total is also declining in recent years. Between 1938-39 to 1949-50, the proportion of non-credit societies increased from 10.92 p.c. to 26.9 p.c. Thus the emphasis is being shifted from credit to the productive and distributive functions of the movement. The movement is branching out into new directions.

Fourthly, another interesting development is the growth in the number of multi-purpose societies as against single-purpose societies. The general tendency before the Second World War was to form a separate society to serve one particular purpose.

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CHAPTER 17

THE STATE AND AGRICULTURE

During the British period the government took some interest in the development of agriculture. In previous chapters, a brief description of some of the measures adopted by the government for the improvement of agriculture has already been given. It remains to piece together this information and supplement it with statements of additional measures of state aid.

In the early stages the government was forced to intervene for giving relief to the agriculturists in certain directions. Thus the government had to pass laws to relieve the distress and unrest among the tenants. The Rent Act of 1859, the Tenancy Act of 1885 were all directed to give some relief to tenants who were previously being rack-rented by the landlords. Gradually these measures took a positive character. Thus the government passed the Land Improvement Loans Act in 1883 and the Agriculturists' Loans Act in 1881 to provide finance to the agriculturists. In 1889, Dr Voelcker of the Royal Agricultural Society issued a report surveying agricultural conditions and made valuable suggestions for their improvement. The next important positive step was the passage of the Co-operative Societies Act in 1904, which marked the beginning of the co-operative movement, the greatest single measure of agricultural improvement in this country. Next year the various governments established Departments of Agriculture, both at the centre and the provinces, charged with the duty of framing an agricultural policy and of carrying it out in details. In 1906, an All-India Agricultural Service was instituted, whose personnel was recruited for the purpose of giving effect to government policy on agriculture. Perhaps the most important contribution to agricultural development has been the provision of irrigation facilities. The government has spent large sums of money in the construction of irrigation canals. The canal system in the Punjab, U P, Madras and other areas has contributed a great deal to the improvement of agriculture in this country.

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Advocates of single-purpose societies have, on the other hand, argued that a multi-purpose society would prove to be a cumbersome organisation and its working may overstrain the ability of the average villager. Secondly, in single-purpose societies, the failure of one of them will not involve others in danger. But in a multi-purpose society, failure in one line of business may bring down the whole organisation. Lastly, a multi-purpose society would necessarily embrace a large area for efficient operation. This may give rise to a difficulty. In a single-purpose society, organised in a small area, members have opportunity to know each other intimately, and this knowledge and trust will help in the generation of the co-operative spirit. Such a spirit may be lacking in a multi-purpose society with its large area of operation and large number of members, most of whom may know each other only imperfectly.

Thanks to the vigorous advocacy of the Reserve Bank of India, the multi-purpose idea has obtained a firm footing in the co-operative movement. U.P. leads with 22786 multi-purpose societies, followed by Bombay (2161 societies) and West Bengal with 1641 societies. In the U.P., the State Government has adopted a Development Plan which envisages the organisation of development blocks comprising 12 to 15 villages, with a multi-purpose society in each village. Starting with the improvement in agricultural production, these societies are intended to cover every aspect of rural economic life.

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The last phase is the very important role assigned to agricultural development in the Five Year Plan. The Planning Commission have given the highest priority to the development of agriculture and irrigation, and Community Projects and the National Extension Service have been instituted for the purpose of bringing about suitable changes in the rural economy of this country

This is a broad survey of the state aid to agriculture given in this country. It remains to fill in some details in order that one may have a complete picture of the role played by the state in relation to agricultural development. The Agricultural Departments of the States have been performing a variety of functions designed to improve agriculture. They are running Demonstration Farms in different parts of the country where cultivators may come and see the actual working of improved methods of cultivation. The Department has undertaken the task of growing and distributing improved varieties of seeds etc. It is working hard to popularise manures, implements etc., and is providing good education for the elimination of pests, insects and plant diseases.

The government has also started large numbers of Agricultural schools and colleges for the spread of agricultural education. Mention must also be made of the valuable services rendered by the Veterinary Departments of the State governments. These Departments are concerned with the prevention and care of cattle diseases and are carrying on useful research for improving the breed of cattle and poultry.

Thus the State in India has been trying in various ways to improve agricultural conditions. But so far only the fringe of the problem has been touched. Only a beginning has been made, and much remains to be done. It has been estimated that the various governments in India are spending about 11 as. per head on agricultural development as against Rs 20 per head in Canada and Rs 77/- per head in the U.S.A. So in terms of finance, the extent of state aid to agriculture is very meagre.

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Criticism of the movement: In spite of the achievements of the movement, it has been subjected to serious criticism. In first place, it has been urged that most of the benefits that are claimed on behalf of the movement are of non-economic nature, and these are difficult to measure. Moreover, these benefits become available only where there are good societies, and the number of such societies is not large.

Secondly, the vast majority of the societies have been organised for the supply of credit, and let us examine their achievements. The amount of fresh advances granted by the agricultural credit societies was only Rs. 17.98 crores. This forms only a very part of the total requirements of the agriculturists. Hence it is no exaggeration to say that the movement has touched only the fringe of the problem.

Thirdly, a number of defects can be found in the working of many of these societies. According to audit classification, the bulk of the societies in most states belong to the C class. In West Bengal, Bihar and U.P., only .6, 2.6, and .6 per cent of the societies belong to the A and B class. Several official enquiries have revealed that a large number of societies suffer from the following defects ; (a) Loans have been often given on an indiscreet basis without proper enquiry. In many cases loans have repeatedly been granted to a few favourites of the managing committee. A number of loans are in reality *benami* transactions. (b) Borrowers are not always punctual in repayment, and in many cases the Managing Committees have shown an excessive tenderness in dealing with such defaulters. In many cases fictitious repayments are recorded and borrowers have been granted fresh loans on the same dates. As a result, the proportion of overdue loans and bad debts is quite large. (c) Most of the members do not take any interest in the working of these societies.

Fourthly, though the main principle of the movement is to encourage thrift and self-help it has not succeeded in attracting a considerable volume of funds from the members. As a result, the societies and the co-operative banks had to depend increasingly on external sources for the supply of funds. This is a discouraging feature of the movement.

The most serious charge against the movement is that the fundamental principle of true co-operation is lacking. The fact

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Thirdly, a number of defects can be found in the working of many of these societies. According to audit classification, the bulk of the societies in most states belong to the C class. In West Bengal, Bihar and U.P., only .6, 2.6, and .6 per cent of the societies belong to the A and B class. Several official enquiries have revealed that a large number of societies suffer from the following defects ; (a) Loans have been often given on an indiscreet basis without proper enquiry. In many cases loans have repeatedly been granted to a few favourites of the managing committee. A number of loans are in reality *benami* transactions. (b) Borrowers are not always punctual in repayment, and in many cases the Managing Committees have shown an excessive tenderness in dealing with such defaulters. In many cases fictitious repayments are recorded and borrowers have been granted fresh loans on the same dates. As a result, the proportion of overdue loans and bad debts is quite large. (c) Most of the members do not take any interest in the working of these societies.

Fourthly, though the main principle of the movement is to encourage thrift and self-help it has not succeeded in attracting a considerable volume of funds from the members. As a result, the societies and the co-operative banks had to depend increasingly on external sources for the supply of funds. This is a discouraging feature of the movement.

The most serious charge against the movement is that the fundamental principle of true co-operation is lacking. The fact

rains and flood Insufficient rainfall is attributed to some extent to the large-scale deforestation which has taken place throughout the last 100 years These lead to a failure of crops and famines

The ultimate causes are all traceable to the great poverty of the masses As a result, a large number of people live constantly on the verge of starvation, and when food prices rise considerably, most of them are unable to buy any food. The causes of such poverty are numerous The growth of population, the almost stagnant condition of agriculture and the decay of old village industries have thrown an increasing population on land The low productivity of agriculture has driven most of them to poverty and indebtedness

Organisation of famine relief: Whatever the position in early days, the British government gradually came to assume some responsibility for the relief of famine-stricken population in India Following the recommendations of several Famine Commissions the government drew up a famine relief code which laid down a certain procedure for the grant of relief during the period of a famine The district officers are required to follow this procedure whenever a famine is threatened in their jurisdictions

The first task is to know when a famine is going to occur There are well-known signs by which the government officers can anticipate the approach of famines conditions When the rains fail in any particular region for one or two seasons, followed by crop failures, the officers look for the following symptoms to appear, e.g., rise in food prices, fall in private charity, increase of petty thefts and crime, aimless wanderings of the people, a significant increase in the number of beggars etc If these signs appear, the general conclusion is that a famine is approaching The officers are then required to take preliminary steps for the relief of the people such as the suspension of land revenue payments, grant of liberal advances to cultivators etc If the conditions deteriorate, the officers inspect the villages and prepare a list of persons needing relief Test works are started in the affected villages to test whether the people really need relief If a large number of people are attracted to these works, these are converted into "relief camps". Gratuitous relief is granted to the old and the infirm, kitchens

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Lastly, satisfactory working of co-operative societies would depend to a large extent on the availability of a well-trained and adequate staff. The existing facilities for training are meagre and there is a great need for the proper training of all grades of administrative, managerial and field staff of the co-operative departments and organisations. Practical training should form an important part of the training scheme.

EXERCISES

1. Trace the growth of the co-operative movement in India. (Cal. 1941 ; Nag. 1941 ; Punj. 1928).

2. Describe the main features and the different forms of Co-operative Societies in India. (All. 1942).

3. Describe the organisation and functions of the primary Co-operative Credit Societies. (Ag. 1938).

4. Write notes on (a) Central Co-operative Banks and (b) State Co-operative Banks.

5. Account for the relative backwardness of the non-credit co-operative societies in India. Discuss their present position. (Punj. 1942).

6. How far has the co-operative movement succeeded in fulfilling the credit needs of Indian agriculture ? What are its main drawbacks ? (Jammu and Kash. 1953).

7. What are the various ways in which co-operation can solve the problems of (a) agricultural marketing, and (b) rural industries in India ? (Gau. 1953 ; All. 1942).

8. Discuss the possibilities of co-operation in respect of (a) agriculture, and (b) cottage industries. (Cal. 1948, 1945).

9. What do you understand by a multi-purpose co-operative society ? How far has this type been successful in India ? (Del. 1953 ; Ag. 1953 ; Pat. 1953 ; All. 1941).

10. Examine in detail the actual and possible benefits of the co-operative movement in India. (Cal. 1953, 1949 ; Punj. 1933).

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To study the results of the campaign it is necessary to divide it into two periods—the first period from 1943 to 1947, and the second period from 1949 to present day

In the *first period* the Campaign included the following measures, viz, (a) switch over from the cultivation of cash crops, mainly from short staple cotton, to that of food crops, (b) intensive cultivation of land through irrigation, supply of better seeds and manures and better farming practices and (c) extensive cultivation by bringing current fallow land, culturable waste land etc, under cultivation. There was no target of food production at this stage. The State governments were expected to prepare suitable schemes along the above lines and the central government gave suitable grants and subsidies to them in order to enable them to finance these schemes. Between 1943 to 1950-51, the central government sanctioned a total expenditure of Rs 675 crores for this purpose. In September 1946, it was decided to place the whole campaign on a planned basis, and an all-India target of food production was fixed at 4 million tons. On the whole, though there were some minor achievements, the first Campaign did not yield any significant results. So the government appointed another Foodgrains Policy Committee in 1947. The Committee made a number of recommendations for increasing the tempo of the campaign, such as greater attention to minor irrigation works, plans for the production of fertilisers, and the establishment of an organisation in the villages based on the Panchayats and co-operative societies to help in the production drive etc. The government also invited Lord Boyd Orr to review the working of the Campaign. The second phase of the campaign is the result of the consideration of all these recommendations.

In the *second phase*, the central government appointed a Commissioner of Food Production with wide powers to carry on the campaign. All state governments also set up sub-committees of the cabinet for taking quick decisions and implementing policies without delay. The objective of the new policy was to achieve self-sufficiency in food production by March 1952. The deficit to be made up by the target date was set at 48 lakh tons over the production in 1947-48. Pro-

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Lastly, as the Krishnamachari Committee (1952) pointed out, the greatest defect from which the campaign suffered was the fact that it was not realised that all aspects of village life were inter-related and improvements could not be split up into a number of detached programmes operating independently. As a result, the movement has not aroused nation-wide enthusiasm and has not been converted into a mass movement for improving the level of village life.

Lines of reform: It is obvious that though the Grow-More-Food Campaign has resulted in some increase in food production, it has failed to achieve results expected of the movement. The fundamental reason for this is the fact that the problem of increasing food production is linked up ultimately with the wider problem of raising the level of rural life. The Grow-More-Food Committee of 1952 have made a number of recommendations to revitalise the movement. In their opinion the campaign should be enlarged so as to cover a wider plan for the development of village life in all its aspects. For this purpose they suggest the establishment of an extension organisation in the villages to assist in the co-ordinated development of all aspects of village life. At the village level, one worker who should be properly trained should be appointed to serve 5 to 10 villages. It should be his duty to convey to the farmer the lessons of research and to arrange the supplies and services needed by the farmer. There should also be a multi-purpose society for each village or group of villages. At the headquarters of the taluq or tahsil, there should be one Development Officer or Extension Officer, whose duty would be to co-ordinate the activities of the village officers.

Besides this National Extension Service, the government should undertake a survey of areas suitable for minor irrigation works, and more attention should be paid to the development of these works. Adequate numbers of seed farms should be established for providing seeds of good quality to the farmers, and continuous efforts should be made to utilise local manurial resources to the maximum extent. To ensure greater availability of cow-dung for compost, the village panchayats should be assisted for planting trees on waste lands and supply of soft coke should be extended to areas where its economic distribution is possible. It will be necessary for the Central Government to provide the major portion of the finances that will be required

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CHAPTER 18

FAMINES AND FOOD

From very early times India has suffered from famines. These have been frequent visitors both during pre-British and British periods of our history. During the rule of the East India Company, there were records of at least 12 famines and 4 severe scarcities. In 1860 occurred a great famine in North-West India when the government opened the first poor-houses in order to provide some relief to the population. In 1878-81 another great famine visited south India, and this led to the appointment of the First Famine Commission in 1880. Following the recommendations of this Commission, the government decided to set up a suitable machinery for famine relief. The famine of 1896-97 was followed by the appointment of the Second Famine Commission, and in 1901 a Third Famine Commission recommended the adoption of a policy of a liberal grant of Takavi loans, and the early suspension of land revenue during a famine. The elaborate famine relief machinery was the result of the recommendations of these Commissions.

In those days famines were famines of food. They occurred from the actual shortage of foodgrains in the country. But now-a-days with the development of transport throughout the country, the character of famines has been changed. Modern famines are, properly speaking, money famines. They occur not because there is an actual shortage of food in the country, but because the masses do not possess enough money to buy food at high prices. It seldom happens that crops fail all over the country. It is now possible to transport food from these surplus areas or from the world outside to the areas where crops have failed. The Bengal famine of 1942 was of course an exception on account of the fact that it was not possible to bring food from outside India to the famine-stricken areas as there were considerable transport difficulties.

Causes of famines : The causes of famines may be divided into two groups,—viz ; (a) direct or immediate causes, and (b) indirect or fundamental, causes. The immediate causes are (a) draught, insufficiency or the failure of rains and (b) excessive

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CHAPTER 19

COTTAGE AND SMALL-SCALE INDUSTRIES

India was once very famous for her cottage industries. From very early times the skill of the Indians in the production of delicate woven fabrics, in the mixing of colours, the working of metals and precious stones and in all matters of technical arts enjoyed a world-wide celebrity. Even under the rule of the East India Company, there is ample proof to show the excellence of the products of her cottage industries. In 1787 exports of Dacca Muslins to England amounted to Rs 30 lakhs.

But owing to a combination of circumstances, most of these cottage industries began to decline from the early 19th century. The main factor leading to this decline was the rise of the factory industry in England and later in India. The invention of the powerloom in England completed the decline of Indian industries. A second most important reason was the establishment of an alien rule in India after the battle of Plassey. The English education and the influence of the foreign rulers led to a change in the tastes and fashion among Indians. As a result, the new aristocracy ceased to patronise Indian goods and switched over to foreign goods. The nawabs and courtiers of early days used formerly to patronise and support the artisans. They began, however, to imitate the British rulers, and this had an adverse effect on the fortunes of the cottage industries. The policy pursued by the East India Company was also an important factor. Under the pressure of the British Government the company began to discourage the export of Indian manufactured goods to Europe, and they refused to adopt the policy of protection for the Indian industries when machine-made goods from Great Britain flooded the Indian market. The result of the operation of these factors was the decline of a large number of cottage industries.

Definition of cottage industries: Before one proceeds further to examine the economic position of cottage and small-scale industries, it is necessary to define these two terms clearly. *Without entering into lengthy discussions on this point it is best to follow the definitions given in the Report of the Fiscal*

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In addition to these measures, the government has also adopted some long-term measures for the prevention of famines. In 1870 a Famine Insurance Grant was set up with funds earmarked annually as a reserve against the occurrence of famines.

The Food Problem and the Government: The relation between the growth in population and the food supply has already been discussed in a previous chapter. The food problem in India is largely a problem of bringing about such a large expansion in agricultural production as will assure to an even increasing population progressively rising levels of nutrition. In this section we are going to review the steps taken by the government to increase the food production of the country.

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The Report of the International Planning Team sponsored by the Ford Foundation has classified these industries into two broad groups, viz., (a) traditional cottage industries in the rural areas working primarily to meet the needs of the village itself and only occasionally for the nearby village or small town markets, and (b) small industries including traditional artistic crafts aiming at selling in larger markets, both at home and abroad

Some important cottage industries. Among important cottage industries mention should be made of the handloom industry, the silk industry, the woollen industry, pottery, glass bangles industry, brass and bell metal industry etc

Handloom industry: Next to agriculture, the handloom industry provides employment to the largest number of people. According to the Factfinding Enquiry Committee of 1941, there were about 20 lakh handlooms in India. About four-fifth of India's textile industry's labour are employed in this industry. The total production of handlooms has been estimated to amount to 810 million yards in 1950-51, i.e., about one-sixth of the total mill production

Organisation: There are many peculiarities in the structure of this industry. At one end there are independent weavers operating one or a few looms and at the other end there are small *karkhanas* operated by financiers and employing wage workers. "In fact the handloom industry today presents a pageant of all the known stages in industrial evolution." The number of independent weavers is, however, declining, and it is only in Assam, Bihar and to some extent in Madras that a great majority are still independent weavers. In Assam most of the weavers are women and they carry on weaving chiefly for home use. In a large majority of cases, these weavers obtain their raw materials from dealers on credit, and sell their cloth either to the mahajans or at the local *hats*. In areas where production is largely for distant markets and the weavers are financially weak, they have become employees

In the urban areas, there are small-scale industries of a seasonal nature like brick-making, which engage part-time labour, and others like small hosiery plants, engineering factories etc, which provide whole time occupation to a large number of people

The Report of the International Planning Team sponsored by the Ford Foundation has classified these industries into two broad groups, viz, (a) traditional cottage industries in the rural areas working primarily to meet the needs of the village itself and only occasionally for the nearby village or small town markets, and (b) small industries including traditional artistic crafts aiming at selling in larger markets, both at home and abroad

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grammes of increasing food production that were adopted were along the following lines, viz., (a) construction of minor irrigation works, wells, tanks, etc., (b) providing manures and fertilisers, (c) supplying good seeds and (d) extending the area under cultivation through land reclamation operations. A programme for the reclamation of 3 million acres of land in seven years from 1949-50 was drawn up by the Central Tractor Organisation and is being implemented as part of the GMF Campaign. Besides this, schemes relating to fisheries, subsidiary foods and crop competitions were included in the programme.

This completes the description of the salient features of the second GMF Campaign. If one reviews the campaign critically, certain achievements became at once apparent. The proportion of expenditure devoted to the construction of minor irrigation works, land reclamation etc., is bound to make a permanent contribution to the solution of the food problem. Good results have been achieved in the production of raw jute and cotton. Knowledge of the possibilities of improved methods of agriculture is now widespread among a large section of the agricultural population.

But it has got to be admitted that the campaign has not achieved results expected of it. The finances and supplies of good seeds, fertilisers etc. made available during the campaign were entirely inadequate in view of the large area to be covered. Even these meagre resources were spread too thinly over large regions instead of being concentrated in favourable tracts. Secondly, frequent changes made in the objectives of the campaign were often confusing. There was, first, the objective of self-sufficiency in food production, followed by that of an integrated policy for foodgrains, cotton and jute. Thirdly, there is also the effect of seasonal vicissitudes on the success of the campaign. A series of natural calamities created great difficulties for the success of the campaign.

Another important reason for the comparatively small success was the fact that the whole campaign was organised on a temporary basis; its execution was entrusted to staffs hurriedly recruited, each set being responsible for a different programme. The co-ordination between the Agricultural and other departments and the regular state administration was imperfect.

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Present position and defects Though after more than hundred years of mill competition the handloom industry still employs a large number of men, the economic condition of weavers is far from satisfactory. The present earnings of weavers are extremely low, and a large number of them are facing the threat of unemployment. Moreover, they are heavily indebted. The weaver has only a limited market and he has often to sell his cloth in the bazar at whatever price he can get because he cannot wait. There is no marketing organisation to sell the products of this industry at reasonable prices. In the case of independent weavers credit has to be obtained at a high charge. Under the stress of competition the quality of handloom cloth has deteriorated in certain places and consequently there have been complaints from consumers regarding dimensions, weight, ends and picks per inch etc, injuring the reputation of handloom products. Lastly, in a large number of cases the ignorance and conservatism of the weavers make them disinclined to adjust their lines of production and types of designs to suit modern tastes. Hence the handweaver's production cost is bound to be higher, and he is facing a declining market.

Prospects and advantages: As against these unfavourable factors, one must take account of the fact that though this industry has almost disappeared in a large number of countries during the last 100 years, it has not done so in India. This shows that this industry has a unique capacity for survival. There are several reasons for this. In the first place, the industry possesses commendable capacity to adjust itself to changing conditions. The weavers have adopted modern implements like fly-shuttle sleys, dobbies and jacquards etc. They have tried to follow changes in popular tastes and have adjusted their workmanship to modern requirements. Secondly, the capital cost and running expenses of the handloom weaver are small, and he has not to worry about depreciation, insurance,

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Lastly, the committee expressed its opinion that though the prices of foodgrains are not likely to fall to uneconomic levels in the near future, the Government of India should make a declaration accepting the principle of guaranteeing minimum prices for the more important crops.

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1. Describe the causes of famines in India. Suggest remedies for preventing the occurrence of famines. (Cal. 1949; Punj. 1940).
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3. Give a critical account of the measures adopted by the Government of India for dealing with the food problem of the country. (Cal. 1953, Punj. 1953, Pat. 1953).
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State aid to the handloom industry Recognising the importance of the handloom industry, the government has recently adopted certain proposals to help the development of this industry. The first step in this direction was the establishment of the All-India Handloom Board in October, 1952 to stimulate the development of the industry on sound lines. The Central Government has also imposed an excise duty of three pies per yard on mill cloth, and this was expected to yield an annual revenue of about Rs 6 crores. This money was to be utilised for assisting the handloom and khadi industries. Thirdly, an internal marketing organisation with a central marketing organisation and a number of branches in important cities in India has also been set up. An External Marketing Organisation with a net-work of Marketing Officers and Sales Emporia covering the Middle-East and South-East Asian markets has also been established. Fourthly, the Handloom Board are making experiments with new types of looms and equipment intended to augment the output of handloom cloth.

The States have also adopted a number of measures to this effect, and these schemes are being financed by grants sanctioned by the central government. West Bengal, for example, has received an interest-free loan of Rs 54,000 to be utilised for the establishment of 12 regional dye-houses in the state. Bihar has also received some grant for setting up a Handlooms Research and Design Centre. Other States have received grants for opening sales depots etc.

Competition between handlooms and mills: In recent years the problem of competition between the handloom industry and the mills and the question of delimiting the spheres of both

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Commission of 1949-50. The Commission defined a cottage industry as one which is carried on generally in the home of artisan himself or in small Karkhanas wholly or primarily with the help of the members of the family, either as a whole-time or part-time occupation. A small-scale industry, on the other hand, is one which is operated mainly with hired labour, though the number of such workers is small. From a technical point of view, small-scale industries belong to the same genus as large-scale ones. They differ from the latter mainly in regard to the number of workers employed. The distinction between a cottage industry and a small-scale industry lies in several factors. The most important is the fact that in a cottage industry, work is done mainly by the members of the family of the artisan with probably a few hired workmen. In a small-scale industry, the workers are mainly hired. Secondly, "cottage industries are generally associated with agriculture in rural areas and provide whole-time occupation only in urban areas ; small-scale industries generally provide whole-time occupation to their workers and are located in urban or suburban areas." This definition is of course not entirely satisfactory. But it will do for our purpose.

Classification : The industries have been variously classified. The most usual classification is between rural and urban industries. Both these groups of industries may further be sub-divided into those providing part-time and whole-time occupations. Part-time rural cottage industries provide supplementary occupation to agriculturists, e.g., basket-making, bidi-making, handloom weaving etc. Whole-time rural cottage industries consist of the well-known village crafts such as pottery, black-smithy, carpentry, oil-pressing by ghanis, tannery, cart-making, hand-loom weaving etc.

In urban areas, cottage industries consist of handloom weaving industry, brass and bellmetal industry, toy-making, wood and ivory carving industry, gold and silver thread industry etc.

There are also rural and urban small-scale industries. There are a small number of small-scale industries like rice and flour mills, khandsari factories, gur-making etc., which provide part-time occupation to agriculturists. Small-scale industries which provide whole-time occupation in rural areas are extremely few in number.

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Other cottage industries: In addition to the handloom industry, there are the silk industry, the woollen industry, pottery, oil industry, rope-making industry, embroidery and lace-making industry, glass industry, paper industry etc. We shall give brief descriptions of some of the more important industries.

Silk industry: Like the handlooms, the silk industry was once in a very flourishing state. But the competition of mill-made products, the change in popular taste and the withdrawal of the patronage of the rulers and noblemen led to the decline of this industry. In recent times the competition of artificial silk is proving to be a serious factor. Important centres of silk-weaving are to be found in Assam, Bihar, Madras, Punjab, the U P, West Bengal, Mysore and Kashmir. Banaras in the U P is famous for its silk saris and has a large and highly skilled weaving population plying about 25,000 looms. Bhagalpur in Bihar is noted for tassar silk. Murshidabad and Bishnupur in West Bengal, Berhampur in Orissa, Sualkuchi in Assam, Bangalore in Mysore, etc. are also noted centres of silk-weaving.

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There are two other peculiarities of this industry to which the Factfinding Committee has drawn attention. In the first place, contrary to popular expectations, the industry does not provide subsidiary occupation to agriculturists. On the other hand, the great majority of weavers, with the exception of Assam, are full-time workers. What is subsidiary in their case is not weaving but agriculture. Secondly, the industry is essentially an urban industry except in backward tracts of the country. In Bombay 45 p.c. of the total looms are found in 26 urban centres ; in Madras 39 p.c. of the looms are found in 49 urban areas. Moreover, though a large number of weavers are still residing in villages, they usually have little connection with agriculture.

With a large number of weavers working in urban areas, a good many subsidiary industries like dyeing, bleaching and finishing, gold and silver thread making and embroidery etc., have also sprung up in the vicinity. In this manner a certain degree of localisation of industry had taken place. Side by side with such localisation some amount of geographical specialisation has also taken place. For example, Dacca had always specialised in artistic cotton saris like *jamdanis*. Santipur and other centres have also been noted for special types of fabrics. Many centres in Western India such as Ahmedabad, Surat and Yeola specialised in the making of gorgeous fabrics. While the above centres specialised in cotton fabrics, others like Murshidabad and Vishnupur in Bengal, Benaras and Man in the U.P., Conjeevaram and Madura in Madras concentrated on silk.

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Problems of cottage and small-scale industries: The problems and difficulties faced by those industries can be classified into four groups Firstly, the antiquated technique of production followed in many of these industries and the old implements are a major stumbling block in the way of their revival Secondly, lack of adequate financial facilities at reasonable cost is also a great impediment The artisans are usually very poor and do not possess the resources to buy good raw materials and to hold out for better prices They are heavily indebted to the *soucars* and have to pay high interest charges and in many cases to sell the finished products to the mahajan dealers where they cannot always be sure of getting proper prices Thirdly, another serious defect is the absence of any marketing organisation to sell the products of these industries both at home and abroad Lastly, due to their illiteracy and conservatism, the artisans have not moved with the times, nor do they always appreciate the need of introducing better designs and finish more in accord with modern tastes There is no doubt that on account of a combination of factors, these industries are to-day facing a crisis, their number of employed workers and their output of production gradually declining and in some cases slowly grinding to a halt

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A proper policy for reviving these industries should start from the market end We must, first, find out what articles will sell and at what prices Then comes designing How should the products of these industries be designed, made and finished so as to attract a large market? The next task should be to provide for the supply of better raw materials, better equipment, better power facilities These questions have to deal with the organisation of production, research and technical

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A proper policy for reviving these industries should start from the market end We must, first, find out what articles will sell and at what prices Then comes designing How should the products of these industries be designed, made and finished so as to attract a large market? The next task should be to provide for the supply of better raw materials, better equipment, better power facilities These questions have to deal with the organisation of production, research and technical

income tax, strikes and lock-outs which weigh heavily on mills. Thirdly, the help of family members economises expenses. The weaver, wife and children have each their parts to perform without any great burden on any of them. Fourth, the weaver has another advantage as he can weave delicate fabrics using high count yarn with complicated designs and cloth of striped and checked patterns. The great merit of high-class handloom products is their distinctiveness and delicacy of workmanship. Lastly, another favourable factor is the general belief that handwoven cloth is more durable, and therefore, cheaper in the long run than mill-made cloth. It is quite clear that the handloom industry can still hold its own and prosper if only a little aid is extended to it. In the words of the Fact-finding Committee, the position of the industry is such that it needs only a little help and not a bolstering up.

Suggestions for helping the industry. In view of the great importance of this industry, there is no doubt that its claim to state aid is not less supportable than that of any other industry. The chief problems facing the weavers are the high cost of raw materials, difficulties and the cost of getting credit, and the absence of good marketing organisation. What they require most is an organisation for the supply of yarn and dyes at reasonable prices, for finding new designs more in accord with modern tastes, and for facilitating the flow of credit at reasonable rates, and for selling the product at home and abroad. That organisation should try to popularise the handloom products in different markets, internal and foreign, and arrange for research on various aspects of the industry. The government has already set up an All-India Handloom Board to which financial assistance is being given. The Board has framed ambitious schemes for the marketing of handloom cloth abroad with the help of marketing officers and opening up emporias in foreign countries. It has also framed plans for stepping up the internal market for cloth. The need for introducing quality standards for handloom cloth is also being increasingly recognised.

Much can be done by the co-operative method. Co-operative societies may help in the procurement of raw materials and marketing of cloth. These may also be organised for the supply of credit and mobile co-operative banking units may help the weavers in getting finance at reasonable rates. It is only

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Export Development Offices should be set up in different parts of the world to promote and stimulate foreign trade in handicrafts and to serve as contacts with foreign buyers and their demands. To improve production and to maintain standards, it would be best to promote the organisation of trade associations, i.e., voluntary associations of members of a given industry or trade. The Central and State Governments should take the initiative in promoting the formation of such associations which would help members with new methods and techniques and also serve as information centres to their members.

To solve the problem of finance, the team has made a number of recommendations. First, the commercial banks should delegate more authority to branches to make loans to small business, and generally try to decentralise their loan business. Secondly, a system of loans against the security of real-estate mortgages should be considered and developed. Thirdly, all states should set up State Finance Corporations with a portion of their funds set apart exclusively for small industries. Fourthly, co-operative banks should expand into the industrial field. The Central Government should also organise a Small Industries Corporation. The primary purpose of the Corporation would be to provide the necessary incentive and help small industry to improve its technique of production and management by working on assured orders for the government. Its basic function would be procurement with power to pre-empt at least 25 per cent of government indents at prices substantially equal to those offered by the general business community.

Lastly, marketing developments should proceed along these lines. First, products of these industry must be made good and of uniform quality. Secondly, they must be so made as to meet the customers' felt needs. Thirdly, aggressive efforts are to be made to reach and stimulate the huge potential markets of the villages and urban areas. With these ends in view, the government should set up a Marketing Service Corporation, to find out the nature and extent of consumer demands through surveys, encourage producers to meet these demands and secure and process orders from wholesales and retailers. This corporation should set up a marketing news service, establishing

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have come into prominence. The Fact-finding Committee examined this problem in 1942, and came to a number of conclusions. According to the findings of that Committee, it was after 1925 that competition from mills became serious. Competition is most serious in respect of saris and dhotis. There has lately been powerful competition from mills in saris of counts 20s to 40s and even in higher counts. In the case of dhotis also mill competition is in respect of medium counts. In gunchas, chaddars, shirtings and coatings serious competition has developed from mills. The effect of mill competition is felt differently in different states. Competition has been keenest in states like Bengal and Madras where white clothing has been in use. States in which the handlooms generally produce cloth of finer counts have suffered more than those where handlooms are mostly organised for weaving cloth of coarser counts. However, it is not possible to assess statistically the consequences of mill competition on handlooms. To some extent, moreover, handlooms are trying to encroach upon the styles of goods produced by mills, especially with respect to coatings and shirtings of check designs etc.

The increasing difficulties faced by this industry and the growing unemployment among weavers forced the government to adopt measures for checking mill competition. The Central Government issued an order on the cotton mill industry requiring it to restrict its production of dhotis to 60 p.c. of its production in 1951-52. A penal excise duty was levied on mills exceeding this percentage. The general idea is that the remaining market for dhotis would be reserved for the handlooms. It should be noted that certain varieties of cloth like coloured saris, sarongs and lungis, honey-comb towels and furnishing fabrics of different types were reserved for the handlooms as early as 1950. The Central Government has also set up a Committee to examine the problem of delimitation of markets between handlooms and mills. The Committee is expected to submit its report in September, 1954.

The pros and cons of such a delimitation have been examined by the Fact-finding Committee. The question is, how far such delimitation will benefit the handlooms without throwing a great burden on the mill industry? The restriction has already resulted in a rise in cloth prices, and to that extent the consumers have been hard hit. There is considerable doubt

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the U.K., business units employing between 5 and 30 persons produced 19 p.c. of the total output and employed 29 p.c. of the total working population in that country. In pre-war Germany, small establishments employing 5 persons formed 22.3 p.c. of the total number of establishments. In Japan, small plants employing less than 5 workers employed 53 p.c. of the total number of workers in the country. In the U.S.A., traditionally a country of large businesses, "small business makes up 92.5 p.c. of U.S. business establishment, employs 45 p.c. of the country's workers and handles 34 p.c. of its volume of business." Thus these industries occupy a significant place in the economy of these countries, and there is no reason to expect that the case need be otherwise in India.

There are also additional considerations in favour of these industries. As is well-known, labour is cheap and abundant in India, while capital is dear and is inadequate in supply. In such a country, labour-using and capital-saving occupations have a special function to discharge. These industries exactly fit in with such requirements. One of our principal economic problems is the large-scale unemployment and under-employment existing in the country. The development of large industries over the last century has not proved much effective in solving this problem. Even if large industries are developed at a faster rate, it is doubtful whether they could provide occupation for more than a million or two of the workers. This would still leave a large number of unemployed. Thus from the point of view of securing maximum employment in a capital-scarce country, small-scale and cottage industries have an important part to play in our economic life.

Moreover, small-scale industries mean decentralised production, and the latter has certain advantages. In the first place, such decentralised production has important military and tactical advantages. The enemy can destroy centres of large-scale industries but cannot harm small-industries scattered all over country. Secondly, decentralised production will result in a wider diffusion of purchasing power among the people. The growth of large-scale industries has everywhere resulted in an extremely unequal distribution of income.

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the development of this industry. A change in popular taste in favour of Indian silk goods, and the high import duty on foreign products have given some stimulus to this industry.

Woollen industry: This is also an old industry. Its main products are shawl, carpets, blankets etc. Shawls of Kashmir are very famous throughout the country. Though the prosperity of this industry has declined in recent years, it still holds an important place. The Kashmir government is spending considerable sums of money for its improvement.

The carpet-weaving industry made large advances during pre-British days. But it has declined materially owing to the popularisation of artificial dyes, and introduction of cheap designs under the influence of foreign markets. At present the main centres of production are Kashmir, Amritsar, Mirzapur and Gwalior. Srinagar and Amritsar have specialised in the production of costlier products, while Mirzapur and Gwalior turn out cheaper and rough products. The manufacture of rough blankets, known as *Kambalis*, is also carried on in the U.P. and other states.

Pottery: This cottage industry is carried on in almost every village in India to meet the demand of the people for earthen wares like surahis, handis, gharas etc. Clay dolls are also manufactured in many places, the most important centre in West Bengal being Krishnagar.

Embroidery and lace-making: Important centres of this industry are Lucknow in the U.P., West Godavari in Madras, Darjeeling in West Bengal etc. Nowadays this industry is in difficulties though efforts are being made to revive it.

Glass industry: This is also one of the most ancient industries of India. The most famous centre is Ferozabad in the U.P., where "shisagars" are justly noted for their bangles and other glasswares. Besides Ferozabad, glasswares are also manufactured in West Bengal, Bombay, the M.P., Punjab and in Madras. Hathras in the U.P. is also noted for producing glass battons, animal figures etc.

Paper industry: Manufacture of paper by hand existed in India from very early times. But it has almost disappeared owing to the competition of machine-made products. Of late attempts are being made to revive it. Chief centres of production are Madras, Hyderabad, U.P., Manipur, Bombay

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State Finance Corporations: It has been proposed for some time that while the Industrial Finance Corporation, set up by the Government of India, is designed to provide long-term finance to large units, the states should establish State Finance Corporations for financing small-scale and medium-size units To facilitate the establishment of such Corporations the Central Government passed a State Finance Corporation Act in 1951. The Act is an enabling Act providing for the establishment of State Financial Corporations in different states The share capital of each Corporation is to be fixed by the state government, subject to a minimum of Rs 50 lakhs and a maximum of Rs 5 crores The public may be allowed to subscribe to the shares to the extent of a maximum of 25 p c, the rest to be subscribed by the state government, scheduled banks, co-operative banks, insurance companies and other financial institutions As in the case of the IFC the Corporations can accept fixed deposits to be kept for a minimum period of 5 years, issue bonds whose aggregate amount is not to exceed 5 times the paid-up capital and reserve funds These bonds as well as the share capital are to be guaranteed by the state governments as to the repayment of the principal and payment of interest or dividend The corporations are (a) to grant loans and advances repayable within 20 years, (b) to guarantee the loans floated by industrial concerns and (c) to underwrite the issue of shares, bonds or debentures on the same terms as the IFC The maximum amount to be lent to any concern is not to exceed 10 p c of the paid-up capital of the Corporation or Rs 10 lakhs, whichever is less

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That something has already been done has been noted in the section on the state aid to the handloom industry. In addition to the All-India Handloom Board, the government has also set up the All-India Khadi and Village Industries Board and the All-India Handicrafts Board for the purpose of stimulating the development of cottage and small-scale industries. Grants totalling about Rs. 6 crores have been given to these institutions during the 5 years ending 1953-54 to enable them to finance various schemes. The Five Year Plan includes provisions for spending Rs. 27 crores (Rs. 15 crores by the centre and the rest by the states) for the development of these industries. The All-India Khadi and Village Industries Board has chalked out a detailed programme for the development of such industries as soap-making with neem oil, leather industry, hand-made paper, hand-pounding of rice and bee-keeping. Some marketing organisations are also being set up to encourage the sale of the products of these industries.

Recommendations of the International Team : It will be helpful if we review at this stage some of the important recommendations of the Ford Foundation International Planning Team on small industries. The Report of this team has recommended the establishment of at least four Institutes of Technology, at different regions in India to initiate and carry on investigation as to the existing methods of production, to conduct applied research for providing the development of these industries and to disseminate the methods and results thus obtained among the artisans and industrialists through mobile demonstration units and travelling industrial extension workers. Secondly, to improve the design and technical quality of the products, a National School of Design should be set up to serve as a centre for creative studies in design and fashion. The basic functions of this school would be to prepare improved designs suitable for commercial production. In addition, a Customers' Service Corporation is also to be organised to conduct continual survey of current production, to gather samples and information from Indian and foreign buyers. This organisation should thus serve as a liaison between producers and consumers. To improve the marketing organisation,

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Much can also be done by paying more attention to the organisation of industrial co-operatives among the small producers and artisans. It is essential that co-operative banks should expand into the industrial field.

Relation between cottage and small-scale industries and large industries: Many of the supporters of cottage industries have argued that these should be granted protection in certain ways against the competition of large-scale factories. They draw attention to the injury caused to cottage and small-scale industries by the competition of large-scale industries. In their opinion some restrictions should be placed on large factories for the protection of the markets of small industries. This raises the question of the proper relationship that should exist between these two types of industries.

At the outset it is necessary to state that not all cottage and small-scale industries are in competition with large factories. In the first place, there are a large number of small industries whose continued existence depends on the supply of materials or components for large factories, e.g., tape-making, motor cushion making, bobbin making etc. Secondly, there is a considerable field where cottage and small-scale industries can carry out many of the processes incidental to large-scale methods of manufacture. For instance, factory-made splints and veneers could, under proper conditions, be economically utilised in cottage industries to manufacture matches. It is well-known that a good deal of factory production in Japan and Switzerland is carried on by this method. Lastly, in regard to those cottage industries which produce artistic, semi-luxury or luxury goods, competition from large-scale industries is almost non-existent. There are also a number of cottage and small-scale industries which may be established in the rural areas. These are primarily concerned with processing local produce and selling in a predominantly local market. With some modernisation these can stand the competition of large industries.

These are, however, fields in which both large-scale and small industries are in competitive position. Even in a large number of these cases, a modernised cottage industry may safely hold its own against large factories. Emphasis should, first of

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contacts and reporting liaison with all principal foreign and domestic markets.

The Team also recognised that the co-operative movement may help the development of these industries in many ways. Co-operative societies may help in procuring raw materials and the marketing of finished products. They could also help in the provision of credit. Mobile co-operative banking units may provide a partial answer to helping small village industries obtain credit for modernisation.

These recommendations are highly valuable and will, if carried out, solve many of the problems of the small-scale industries.

Place of cottage and small-scale industries: There is no doubt that small-scale and cottage industries occupy an important place in the Indian economy. Those who argue that it is useless to spend money on the development of these industries as they are bound to collapse in the face of the competition of large-scale industries fail to take account of all the relevant factors. As the Fiscal Commission pointed out in its report, it is not always true to say that the costs of production are usually higher in these industries than those in the large-scale industries. In the first place, while manufacturing costs may be higher in the small-scale industries, this handicap may be partially offset by the relatively low cost of distribution. A cottage or small-scale industry is better able to adjust the nature and quality of its output to local demand in view of its small size and its close touch with the local market. Secondly, modern trends of technological progress are tending to redress the balance in favour of certain types of cottage and small-scale industries. The use of electric motors and internal combustion engines has reduced the economic scale of production units in certain lines of production. Thirdly, the scale might turn in favour of cottage and small-scale industries when we take account of the "social costs" of large industries. The costs of large investments in projects like housing, public utilities etc. which are essential in the case of large industries may be avoided in the case of these industries as these will be located mostly in rural areas or near the homes of the workers.

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Cotton textile industry: This probably one of the oldest large-scale manufacturing industries of India. The first cotton mill was started as early as 1818 in Calcutta. But the real development came after 1854, when a cotton mill was set up in Bombay. Since then the development has been continuous, though the pace was not uniform in all decades. This industry, is notable on account of the fact that it has been developed to its present stature by Indian capital and management against powerful foreign competition, and in the face of the indifference, and sometimes, the hostility of the Government of India.

The industry occupies a unique position in the industrial organisation. The capital invested in the industry is estimated at Rs 100 crores and the annual turnover is between Rs 350 to Rs 400 crores. It provides employment to more than seven and a half lakh workers. It produces 14 p.c. of the estimated world production of cotton cloth and 13 p.c. of the production of yarn. The industry comprises two sections, spinning mills and composite mills. There are 103 spinning mills and 275 composite mills, doing both spinning and weaving. In 1953, the total output of the industry was 4905 million yards of cloth (as compared to 3975 million yards in 1936-38 and 4319 million yards in 1948) and 1510 million pounds of yarn (as compared to 1447 million pounds in 1948).

Structure In the earlier stages of development the industry was confined mainly to spinning, and depended on the China market for the export of yarn. Later it turned increasingly to expanding the weaving section. Here also the industry produced in the early stages only coarse varieties of cloth, the finer varieties being mainly imported or manufactured by handlooms. The years between the two world wars witnessed a large expansion in the manufacture of cloth of fine and superfine varieties. In 1938-39, 457 million yards of dhotis

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partly economic. If large-scale industrialisation involves the decay of village crafts and the concentration of workers in cities, the inherited skill of our artisans will be lost and the lives of the people will become mechanical and monotonous. One should not under-estimate the importance of such social factors because they exercise a great and abiding influence on the economic life of the country.

Financing of cottage and small-scale industries: The importance of these groups of industries will be obvious from the fact that according to the estimates of the National Income Committee, the value of the net output of small industrial units was Rs. 910 crores in 1950-51 as against Rs. 550 crores in the case of factory establishments. They employed 11.5 million workers against 3 million employed in the large industries.

There is hardly any effective organisation to supply their credit needs. They are generally too small to be in a position to tap the money market for funds through the sale of shares or debentures. They have, therefore, to rely mostly on their own resources, which are undoubtedly small and inadequate, and on borrowed capital. (a) The artisans, for example, have to borrow heavily from the *sowcar-mahajans* or dealers. (b) The small units also borrow from the indigenous bankers. These are expensive sources as the loans carry high rates of interest or other onerous conditions. (c) In some cases co-operative banks granted loans to small concerns. But the co-operative movement has not so far paid much attention to the organisation of industrial societies. In West Bengal, for example, out of 7 lakh workers engaged in cottage and small-scale units, the total membership of industrial co-operatives amounted to hardly 65,000 in 1950. Moreover, co-operative finance is available only on a short-term basis. (d) Commercial banks do not generally lend to these concerns. Banks possess limited resources and the demand in the organised markets is more than sufficient to absorb these funds. Moreover, in view of the comparatively weak structure of these units, they are mostly not in a position to offer satisfactory securities as collateral for bank loans.

In view of the inadequacy of these resources, the state had to come to the aid of the small units. (e) Almost every state has passed a State Aid to Industries Act under which state government offered long and medium-term credit to small industrial

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Problems of the Industry. The most important problem before this industry is the shortage of raw cotton. After the partition of the country, large cotton-growing areas fell within Pakistan. Strained political and economic relations led to a considerable fall in the imports of raw cotton from Pakistan, and the industry had to pass through a crisis in 1950 as a consequence of the shortage in the supply of raw cotton. Since then attempts have been made to increase the domestic production of raw cotton. The Five Year Plan has provided for increasing cotton production from 2.97 million bales in 1950-51 to 4.23 million bales in 1955-56. If this target is achieved, only a small amount of imports would be needed to meet the requirements of this industry.

A second problem is the existence of uneconomic units in the industry and the comparatively low productivity of labour in our country. Quite a number of units are clearly of an uneconomic size, and this means higher cost of production. Moreover, according to the Tariff Board of 1932, the labour cost per lb of yarn in a Bombay mill exceeded that in a Japanese mill by 60 p.c., while the labour cost per loom per day for plain grey cloth in a Bombay mill was over 3 times the cost in a Japanese mill. It is doubtful how far the efficiency of the Indian industry has increased since that year.

Another direction in which considerable improvement is essential is the replacement of plant and machinery. The industry is at present working with plant and machinery most of which was not only old but completely outmoded. Nearly 90 p.c. of the machinery in the Bombay mills was more than 25 years old. Operation with such old equipment caused the costs to rise and quality to fall. But the main difficulty in this connection is on the question of finance. It has been estimated

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their work, and from the manner of their working it is evident that for sometime to come the financial assistance they may provide will not be appreciable. As the first report of the Punjab Financial Corporation shows, the scope of its activities is considerably restricted. It can provide financial assistance only to those selected industries which are organised and are able to offer tangible assets as security. Whereas most of the small industrial units are only loosely organised. They are owned by joint families or partnerships or single members. In many cases joint families are broken up without proper partition deeds ; partnerships are made and unmade, without dissolution deeds or documents showing the settlement of accounts between partners. Many of these concerns are indifferent to the maintenance of accounts and other records according to accepted standards, and where some sort of books are kept, they are in the nature of scrolls from which it is impossible to get the exact position of the concern. In view of these facts it is difficult to see how far the mere organisation of State Finance Corporations would solve the problem, as they can deal only with concerns which have a well-defined constitution and status.

There is, moreover, the danger that the indiscriminate establishment of too many State Corporations might result in a mere locking up of available funds by them rather than providing these industries with funds. It would be better if two or more adjoining states jointly start a State Finance Corporation. These Corporations should earmark a portion of their funds exclusively for the use of small industries for ordinary loans.

Other measures: Another measure that has been suggested by the Stroff Committee is to set up a Special Development Corporation to provide long-term finance to small industries. This Corporation should take a lead in organising small industries and rendering assistance to them in the matter of joint or co-operative purchase of raw materials, organised marketing etc. The recommendations of the Ford Foundation Team, already noted, are also worth serious consideration. The commercial banks should delegate more authority to branch managers to grant loans to small units, and wherever necessary, they should set up Local Advisory Boards to examine applications for loans. The government should also consider the adoption of a sound system of instalment credit for financing the purchase

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of raw materials. Lastly, the equipment in the industry is extremely old and there is an urgent need for modernisation of plant and equipment.

One outstanding feature of the industry was the fact that its productive capacity outran the increase in demand. To cope with this problem, the Indian Jute Mills Association has followed a policy of restriction of working hours and sealing a percentage of looms so that a part of the equipment was kept idle. In this way the annual output was sought to be kept within limits so that the price of jute manufactures could be kept at reasonable levels. A consequence of this policy was the expansion of this industry in some of the European and South American countries. Secondly, jute bags have, in recent years, been facing increasing competition from substitutes like cloth and paper bags. Moreover, certain commodities which used to be formerly packed in jute bags are now being bulkhandled, particularly in the U.S.A. As a result, some threat to the continued prosperity of the industry is thus evident.

The third problem, the difficulties regarding the supply of raw jute, has been created by the partition of the country. Of the total jute-growing areas only about 25 per cent remained in Indian territory after partition. Even of the jute grown in these areas, only about 25 per cent was really of good quality. Immediately after partition it became clear that the industry was going to face serious difficulties in respect of raw jute supplies. The devaluation of the Indian rupee in 1949 and non-devaluation by Pakistan upset the exchange parity and led to a breakdown of the normal trade relations between these two countries. To meet this situation, besides adopting temporary measures, the government carried on propaganda for increasing the cultivation of raw jute, and the area under raw jute increased from 652 thousand acres in 1947-48 to 1951 thousand acres in 1951-52. Production of raw jute has also increased from 1658 thousand bales to 4678 thousand bales during the same period. It has been estimated that to achieve their targets, mills would need about 7.0 million bales of raw jute, and the estimated output is expected to amount to 5.1 million bales in 1955-56. The rest would have to be imported from East Bengal.

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What is now wanted for the solution of this problem is a positive and dynamic policy aimed at improving the facilities for production, finance and marketing for the cottage and small-scale industries. Their difficulties can be solved only by efficient organisation, marketing and research.

EXERCISES

1. Examine the causes of the survival of cottage industries. (C. U. 1936, 1930.)

2. Describe the structure and present position of the handloom cotton industry.

3. What difficulties are being experienced by the handloom industry in India to-day? What steps have recently been taken by the government to improve this industry?

4. What means would you suggest to improve the efficiency of the handloom industry?

What steps would you suggest for improving the competitive capacity of small-scale industries? (Bom. 1953.)

5. Examine the importance of cottage and small-scale industries in the industrial structure of India. (Bom. 52, Mad. 53.)

6. Examine the present system of financing for small-scale and cottage industries. What steps would you suggest for improving the present system?

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The real beginning of the industry came after the establishment of the Tata Iron and Steel Company in 1907 at Tatanagar in Bihar. The Indian Iron and Steel Company was formed next year and the Mysore Iron Works at Bhadravati in 1923, the Steel Corporation of Bengal in 1937 and the government steel works in Roukrela (Orissa) in 1953

India is fortunate in possessing rich iron ores and coal mines in the vicinity. Iron ores exist in Bihar, Orissa, Mysore and Madras. Some of the richest iron ores in the world exist in the iron belt of the Singhbhum area and these ores contain 55 to 70 per cent iron. Ample supplies of coal are available in the neighbourhood and other raw materials like limestone, dolomite etc. are also to be found nearby.

The Tatas own iron mines, limestone quarries, magnesite deposits, and coal mines and is therefore, able to reap the advantages of integration. The Mysore Iron Works has been developed by state enterprise, and possesses the only charcoal blast furnace in the world. The total capital invested in the industry has been estimated at about Rs. 61 crores and it provides employment for more than 6 lakh workers. The average wages paid to its workers are the highest in the country. This was the first industry to receive protection in 1924, which was finally withdrawn in 1947. The industry thus enjoyed protection for 23 years and has amply justified the grant of such protection. The total capacity of the main producers for pig iron and steel is estimated to be 1,878,000 and 1,050,000 tons per year. The annual production of pig iron is estimated to amount to 3.66 lakh tons in 1953 and that of steel is expected to exceed 13 lakh tons in 1954. In spite of this increased production, the country has to depend on imports of steel. It has been estimated that the total demand for steel would amount to about 2.8 million tons in 1957.

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and 64 million yards cambrics and lawns were manufactured as against 169 million yards and 2 million yards in 1927-28. Another noticeable trend is the expansion in the volume of exports of cotton goods. India's exports of cotton cloth increased from 7 p.c. in 1913 to 13.5 p.c. of her total production in 1953. Consequently the country today is in a position to depend on domestic sources for meeting almost its entire needs for cloth and also to export substantial quantities to other countries. After taking into account the estimated production of 1200 million yards of handloom cloth, the total output of cotton cloth came to about 15 yards per person.

The industry is spread all over India, though there is some amount of concentration in the Bombay state. Over 60 p.c. of the spindles and looms are concentrated in Bombay, and the rest being distributed largely in south Madras, Madhya Bharat, Uttar Pradesh, West Bengal etc. Of the total number of mills (378 in 1951) there are 67 mills in Ahmedabad, 63 mills in Bombay city and 49 mills in the rest of Bombay state, i.e. 179 mills. Madras contains 77 mills, Uttar Pradesh 21 mills, West Bengal 18 mills etc. There has been a tendency for the industry to move away from Bombay to other consuming centres.

The size of mills also varies widely, some of them containing 100,000 spindles, while there are others with less than 10,000 spindles. There are also composite mills with more than 2,000 looms while there are others with less than 200 looms. According to the Report of the Post-war Planning Committee, a composite mill of 25,000 spindles and 600 looms is to be regarded as an economic unit under Indian conditions. In general, the average size of mills is larger in Bombay and Ahmedabad than that in the rest of India.

The industry is almost entirely privately owned and developed mainly by Indian capital and enterprise.

Protection to the Industry: Though the industry began to develop after 1854, it applied for the grant of protection in 1926. The Tariff Board which examined the case for the grant of protection agreed on the necessity of protection, but differed as to the method and extent of protection. Two members recommended a subsidy on yarn and an increase in the import duty on cotton cloth by 4 p.c. The President of the Board did not favour the grant of subsidy, and recommended an increase

and 64 million yards cambrics and lawns were manufactured as against 169 million yards and 2 million yards in 1927-28. Another noticeable trend is the expansion in the volume of exports of cotton goods. India's exports of cotton cloth increased from 7 p.c. in 1913 to 13.5 p.c. of her total production in 1953. Consequently the country today is in a position to depend on domestic sources for meeting almost its entire needs for cloth and also to export substantial quantities to other countries. After taking into account the estimated production of 1200 million yards of handloom cloth, the total output of cotton cloth came to about 15 yards per person.

The industry is spread all over India, though there is some amount of concentration in the Bombay state. Over 60 p.c. of the spindles and looms are concentrated in Bombay, and the rest being distributed largely in south Madras, Madhya Bharat, Uttar Pradesh, West Bengal etc. Of the total number of mills (378 in 1951) there are 67 mills in Ahmedabad, 63 mills in Bombay city and 49 mills in the rest of Bombay state, i.e. 179 mills. Madras contains 77 mills, Uttar Pradesh 21 mills, West Bengal 18 mills etc. There has been a tendency for the industry to move away from Bombay to other consuming centres.

The size of mills also varies widely, some of them containing 100,000 spindles, while there are others with less than 10,000 spindles. There are also composite mills with more than 2,000 looms while there are others with less than 200 looms. According to the Report of the Post-war Planning Committee, a composite mill of 25,000 spindles and 600 looms is to be regarded as an economic unit under Indian conditions. In general, the average size of mills is larger in Bombay and Ahmedabad than that in the rest of India.

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field in the Pench Valley (Hyderabad) and other fields in Assam, Kashmir and Bikanir. The known coal reserves are of the order of 43,924 million tons, of which 55 p.c. are in West Bengal, and Bihar, 25 are in Madhya Pradesh and Vindhya Pradesh and 20 p.c. in other states. Total annual production now amounts to 36 million tons (as compared to about 190 million tons produced in Great Britain), of which Bengal and Bihar produce about 82 p.c. Total investment in the industry is estimated to amount to Rs. 12 crores and it employs about 2 lakh workers.

Problems of the Industry. The first problem is the extremely small size of the average coal mine in India as compared to the average size of a mine in the U.K., U.S.A., or Germany. The average output per mine is estimated to amount to 38,000 tons as against an average output of 1 million tons in the U.S.A. There are units producing less than 10,000 tons a year. Such a small size results in uneconomic working of mines and in small financial resources which are retarding the mechanisation and the adoption of other improvements. Lack of mechanisation has been responsible for extremely low output and high cost of production. In Germany less than 2 p.c. of the total production of coal was cut by machines in 1913. In 1928 about 90 p.c. was so produced. As a result the average output per worker increased by 39 p.c. during this period and the price of coal fell by 7 p.c. In India only 124 coal cutting machines were in use in 1951 and they produced only 19 p.c. of the total output. Very little progress has also been made in the mechanical loading of coal. As a result, the output per worker is the lowest in India, being 131 tons per worker against 707 tons in the U.S.A. and 444 tons in South Africa. The small size of the mines with their low output has been an important factor in causing shortage in wagon supply.

The second problem is the conservation of coal resources. It is well-known that our reserves of metallurgical coal are inadequate, especially if the steel industry is to be developed further. Moreover, of the total production of metallurgical coal, about 50 p.c. are being wastefully used in railways, industries and collieries themselves. If the future of the iron and steel industry is to be assured, it is necessary to conserve metallurgical coal. The use of such coal for non-essential

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that at present prices about Rs. 100 crores would be needed in Bombay mills alone for modernisation of plant and equipment. The reserves available in the mills are inadequate for this purpose, and the Working Party on this industry has recommended that the government should assist the industry by granting loans at 4 p.c.

Research is another aspect which has not received proper attention at the hands of the industry. The need for conducting research for improving technique and reducing costs in a highly competitive industry like the cotton textile industry requires no special emphasis.

Jute Industry : Like the cotton textile industry, jute goods were manufactured in cottage industries in ancient India. As late as the middle of the 19th century the handloom industry was in a flourishing condition. But with the rise of the mill industry, handlooms have disappeared entirely.

The first jute mill was started at Rishra near Serampore by a scotch gentleman, Mr. George Ackland. The first power loom was installed in 1859. Within a few years, the industry began to make rapid progress. The number of looms increased from 6100 in 1885 to 15335 in 1910, and to 58,639 in 1930.

This industry certainly occupies a very prominent place in the economy of the country. The value of fixed capital invested in the industry has been estimated to amount to Rs. 29 crores, larger than that invested in the iron and steel industry. It provides employment to more than 3 lakh workers. Essentially an export industry, it provides the largest source of the country's foreign exchange. One item of its many products, hessian, provides more than 50 p.c. of the aggregate dollar earnings of this country. There are at present 112 jute mills with a total number of 72,161 looms. The total output of jute goods was estimated to be 8.69 lakh tons in 1953, and exports amounted to 7.48 lakh tons, i.e. more than 86 p.c. of the total output was exported in 1953. This is one of the best organised industries of India, having one of the strongest employer's organisation, the Indian Jute Mills Association.

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This industry is important from many points of view, besides making the country self-sufficient in respect of sugar. It has a considerable influence on the rural economy, especially in Bihar and the U.P., which account for more than 75 pc of the total production of sugar in the country. It provides valuable bye-products, which can serve as raw materials for other industries like power alcohol, paper and paper board, straw board etc. About Rs 50 crores worth of capital has been invested in the industry, providing employment for about 135-lakh workers. At the present moment there are about 160 sugar factories of which 72 and 30 factories are in the U.P. and Bihar respectively. Madras and Bombay possess 16 and 15-mills. The industry has been subjected to close state control almost from the very beginning. In 1934 the government passed the Sugar Cane Act and authorised the State Governments to fix the price of sugar cane. In 1937-38, the Bihar and the U.P. Governments passed the Sugar Factories Control Act under which, first, a Joint Sugar Control Board, and later a Joint Sugar Commission was set-up to be the final authority on all matters connected with the production and sale of sugar and other matters regarding cane prices. A limited quantity of sugar is also produced in *Khandsaris*, i.e., cottage or small-scale industries. The grant of protection to the industry was withdrawn in 1950 and the import of foreign sugar is now regulated by the government under import control regulations. The industry has enjoyed protection for an aggregate period of 18 years.

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now faced with serious competition from foreign mills. A number of countries like Pakistan, South Africa, Brazil, the Philippines and Japan have started to build up a jute mill industry with completely modern equipment. They are often in a position to undersell Indian goods in foreign markets. So Indian mills may find it difficult to maintain their foreign markets unless they take steps to modernise their plant and equipment to the desired extent. The need for such rationalisation has been recognised by the manufacturers, and a number of mills have already begun to modernise their plant. It has been estimated by the Jute Enquiry Commission that in respect of the remaining mills the cost of modernisation would amount to Rs. 40 crores. The Jute Enquiry Commission has recommended that the problems connected with the modernisation of plant and machinery in the jute mill industry should receive the highest consideration of the government.

The Jute Commission has also recommended that in order to assist and stabilise the industry, the government should appoint a Jute Commissioner, and set up a Jute Board and a Development Council. It would be one of the functions of the Board to indicate from time to time fair prices for raw jute in relation to jute goods, and notify such prices. On the question of self-sufficiency for raw jute, the aim should be relative rather than absolute self-sufficiency. Endeavour should be made to secure intensive cultivation and improvement in the quality of raw jute rather than to offer inducements for jute cultivation on a wider scale. The Commission also recommended the establishment of regulated markets at important centres in the jute-growing areas in each state. The organisation of multi-purpose co-operatives is essential for improving the lot of the jute-grower, and the state governments should give all possible help in this direction.

Iron and Steel Industry: It is one of the ancient industries of India. That the manufacture of iron from ores reached a high state of development will be evident from the existence of the Iron Pillar of Delhi. The first attempt to smelt iron ores on modern methods was made in 1777 when two Europeans established a company at Jheria for that purpose. From that time, several attempts were made all of which became failure for one reason or other. In 1875 the Bengal Iron Company

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One of the main problems facing the industry is the adequacy of cane-supply. The government fixed the price of sugarcane supplied to the factories, leaving it uncontrolled in the case of *gur* production. This has often resulted in *gur* production to increase at the cost of sugar production. Moreover, on account of competition between the *gur* and sugar industries some of the sugar factories have been obliged to start early crushing, utilising unripe cane with the consequent increase in cost of production. Lack of planning the cultivation of early, medium and late ripening varieties has also resulted in the absence of adequate supplies of cane throughout a reasonably long season. Lastly, the desire of the state governments to wrest a large percentage of the profits of the industry for the cane growers has been followed by the fixation of very high prices for sugarcane. The industry claims that the payment of such high cane prices is responsible for the high cost of production of sugar. Recently the Central Government held a conference for evolving a satisfactory formula for fixing cane prices. The so-called "sisma" formula under which the price of sugarcane is to be fixed not only on the basis of weight but also by taking into account the sucrose content of the cane is now under the consideration of the government.

Tea Industry: The tea industry is one of the biggest organised industries of India, and is of special importance to Assam, where about 10 p.c. of the population live in the tea gardens. India is the largest producer of tea in the world and supplies about 40 p.c. of the world's demand for tea. About Rs. 50 crores have been invested in this industry, and it is the biggest employer of labour, employing 92 lakh workers. It is one of the most important export industries of the country, and about 68 p.c. of the total estimated production of tea is exported from India. The value of exports amounted to Rs. 101.54 crores in 1953-54, exceeded only by that of jute manufactures. The average annual production of tea is estimated at about six hundred million pounds.

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Problems of the Industry : There is much scope for the expansion of this industry. We possess plentiful supplies of the more important raw materials and the internal demand is growing. Economic development would be hindered if the supplies of iron and steel do not keep pace. The major problem hindering progress in the industry is the lack of finance. To meet this problem, the government has advanced several crores of rupees to both the Tisco and the Scob to enable them to carry out expansion and modernisation of their equipment.

A second problem, from long-term point of view, is the inadequate reserves of metallurgical coal. It is well-known that the supplies of high-grade coal would prove insufficient at the present rate of consumption. There are two ways to solve this difficulty :—first, by the adoption of a suitable policy of conservation of metallurgical coal, and secondly, by the adoption of the Krupp-Renn process which uses low grade coal in the manufacture of pig iron.

Coal Industry : Coal is one of the basic industries as it is an important source of power. Though coal was known in ancient times, its mining on modern methods may be traced to the year 1774 when the first coal mine was opened at Sitaram-pore. At that time the chief use of coal was in fusing metals in the arsenals of the E.I. Co. The real growth of this industry came after 1850 when the construction of railways increased the internal demand for coal. The output of coal rose to 21650 tons in 1858 and to 50,000 in 1868. Since then output nearly doubled in every ten years and by 1912 production reached the figure of 12 million tons. The industry had to face certain difficulties after the world war I and in 1924 it applied to the government for the grant of protection. But the government set up an expert committee and on its recommendations passed the Coal Grading Board Act. A Coal Grading Board was set up for the purpose of certifying the grade of coal. In 1926 a Tariff Board was appointed to examine the question of the grant of protection to this industry. The members of the Tariff Board differed in their opinion and the government decided to postpone taking any action. The next important event was the passing of the Coal Mines Stowing Board Act in 1939.

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production of tea with a view to raise tea prices. The scheme was given effect to through an Act passed by the Government of India. The control scheme succeeded and tea prices rose within a short time.

Secondly, no other industry in India possesses such a bad name for its treatment of labour. There were many abuses in connection with the method of recruitment of labour and the government was forced, from time to time since 1863, to pass laws for the regulation of labour conditions in this industry.

Consumption Though India produces a large quantity of tea, her annual consumption is comparatively small, being less than one-third of production. On average, about one-third of a pound of tea is consumed per person in India, against 94 lbs in Great Britain, 7.7 lbs in the Eire and 70 lbs in Australia. Great Britain is the largest customer of Indian tea. Efforts are being made to popularise the consumption of tea in the U.S.A. In order to popularise the consumption of tea in India and in the export markets, the government has set up a Central Tea Board, and levied a small cess on tea. The proceeds of this cess are utilised by the Board in various ways to popularise tea.

The tea industry fell into difficulties in 1952-53, following the decontrol of tea in Great Britain and the consequent cessation of the bulk purchase of tea by the British Ministry of Food. The prices of tea fell considerably even below the cost of production of many firms. The government and the Reserve Bank promptly adopted a number of measures like the postponement of the implementation of the Minimum Wages Act in this industry, special credit facilities to banks lending to tea gardens etc. Fortunately demand for tea revived within a short period of time, and tea prices have risen as a consequence.

Paper Industry: The hand-made paper industry was an ancient industry in India. But it has declined substantially in the last century, though of late efforts are being made to revive this section of the industry. The first paper mill was started in 1867 at Bally in Hooghly. A second mill was started in 1882, and since then a number of mills were established all over India. The industry applied for the grant of protection in 1924. It received protection in 1925, which was renewed in different forms till 1947, when it was finally withdrawn. It has

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purposes is to be banned and the annual output is also to be restricted. The necessity for such conservation is admitted and the recently appointed Coal Board has adopted a number of measures for the conservation of metallurgical coal. The Coal Board has finally laid it down that the production of such coal should be restricted to 7.9 million tons. Besides, coal mines are being encouraged to adopt sand stowing in the mines which would prevent the waste of coal in pillars to support the ceiling. Secondly, steps are being taken to adopt methods of coal washing, which would improve the quality of inferior coal and make it fit for metallurgical and other uses.

There are other problems faced by this industry, *e.g.*, the problem of inadequate supplies of wagons and transport facilities, the problem of ensuring sufficient supply of labour, lack of an efficient marketing organisation etc.

Among possible lines of reform, mention should be made of the demand for the nationalisation of this industry. One of the most important defects of this industry is the extremely small size of the average coal mine. Unless the average size is made considerably larger, there is no possibility of the adoption of improvements like mechanisation, etc. The small units should be amalgamated into large ones. This is not easy of achievement on a voluntary basis under private management. Hence it is necessary that the state should acquire these mines and reorganise them into economic sizes. Moreover, such nationalisation is also necessary to secure the proper conservation of coal resources.

There are also some difficulties in connection with nationalisation. It would require large financial resources, which we lack at present, and it may be questioned how far it would be proper to utilise our limited financial resources in acquiring an existing industry, instead of devoting them to the task of developing new industries. Secondly, we lack technical experts and the proper administrative machinery for the efficient conduct of such a vital industry.

Sugar Industry : The sugar industry is one of the major industries of our country. India is the original home of sugarcane and had a flourishing sugar manufacturing industry in ancient times. The real growth of the industry in modern periods came after 1931 when it was granted protection by the

purposes is to be banned and the annual output is also to be restricted. The necessity for such conservation is admitted and the recently appointed Coal Board has adopted a number of measures for the conservation of metallurgical coal. The Coal Board has finally laid it down that the production of such coal should be restricted to 7.9 million tons. Besides, coal mines are being encouraged to adopt sand stowing in the mines which would prevent the waste of coal in pillars to support the ceiling. Secondly, steps are being taken to adopt methods of coal washing, which would improve the quality of inferior coal and make it fit for metallurgical and other uses.

There are other problems faced by this industry, *e.g.*, the the problem of inadequate supplies of wagons and transport facilities, the problem of ensuring sufficient supply of labour, lack of an efficient marketing organisation etc.

Among possible lines of reform, mention should be made of the demand for the nationalisation of this industry. One of the most important defects of this industry is the extremely small size of the average coal mine. Unless the average size is made considerably larger, there is no possibility of the adoption of improvements like mechanisation, etc. The small units should be amalgamated into large ones. This is not easy of achievement on a voluntary basis under private management. Hence it is necessary that the state should acquire these mines and reorganise them into economic sizes. Moreover, such nationalisation is also necessary to secure the proper conservation of coal resources.

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The Planning Commission has recommended that steps should be taken to increase the number of mills to 19, and the annual rated capacity from 1,36,600 tons to 2,11,000 tons in the paper and paper board industry, an increase in the number of factories manufacturing straw-boards and other fibre boards to 20 and in the rated capacity from 48,500 tons in 1951-52 to 58,500 in 1955-56. A plant for the manufacture of newsprint is also to be set up with an annual rated capacity of 30,000 tons.

Other Industries: In addition, a large number of other industries like the cement industry, glass industry, match industry, aluminium industry, soap industry, chemical industries like the manufacture of heavy chemicals, paints and varnishes, fertilisers, electrical engineering industries etc, have been established. The Planning Commission has framed plans for 42 industries.

The government has also established a number of industrial concerns, such as the Sindri Fertilizer Factory, Chittaranjan Locomotive Factory, The Machine Tools Factory, The Hindusthan Ship-building yard and the Hindusthan Steel Ltd, at Rourkela in Orissa. The Sindri Fertiliser Factory contains one of the most modern fertiliser producing plants and is capable of producing 350,000 tons of ammonium sulphate a year. The Chittaranjan Locomotive Factory has already started producing locomotives for the use of railways. The Machine Tools Factory specialises in the production of high precision tools, thus providing a basis for the development of other engineering industries.

Review of industrial development: The real growth of the majority of modern industries in India can be stated to have begun after 1850. So our industrial development is more than a century old. In course of this century, India has succeeded in developing a large number of industries like the cotton textile industry, the jute industry, coal, iron, and steel, sugar, matches, paper, cement, glass etc. In view of the total volume and variety of output of manufactured goods, India secured a place among the first 10 leading industrial countries of the world even before the Second World War. That war has given a stimulus to

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in efficiency has been achieved, much still remains to be done. The deplorable thing is that not much has been done to reduce seriously the cost of production of sugar. For example, the average yield of sugarcane at first improved from 12.3 tons per acre in 1930-31 to 15.6 tons in 1936-37. After that it has declined. The same thing may be said about the recovery percentage of juice from cane. It improved from 8.66 per cent in 1932-33 to 9.45 p.c. in 1939-40. The maximum so far reached was 10.28 p.c. in 1942-43. But after that year it has dropped to 9.78 p.c. in 1951-52. This should be compared with the recovery percentage of 12.33 p.c. in Cuba, 12.05 p.c. in Formosa and 14.22 p.c. in Queensland. Not much has also been done with regard to the utilisation of bye-products.

The cost of sugar-cane forms about 62 p.c. of the total cost of sugar. Hence the industry would not be able to produce at lower cost unless the cost of the raw material is reduced. Reduction in the cost of sugarcane depends on three factors, viz., the yield of sugarcane, the quality of sugarcane, and the early transport of cane to the factories in a fit condition. Increase in the average yield, cultivation of improved varieties of cane and quick transport arrangements ; these are essential if the cost of sugarcane is to be reduced. Next in importance is the shorter duration of the crushing season in India as compared to the other sugar-producing countries. The average duration of the crushing season is about 4 to 5 months as against 8 to 10 months in Cuba and Java. The shorter duration in India is due partly to the weather conditions and partly to the absence of early ripening and late growing varieties of sugarcane. If better quality cane is grown and transported quickly to the factories, and if the crushing season can be increased, the recovery percentage can be improved materially with a consequent reduction in the cost of production of sugar. The problem is largely agricultural and much will depend on the extent to which agricultural improvements are adopted.

Next in importance is the question of utilisation of the bye-products of the industry. Bagasse and molasses are the two most important bye-products of this industry. Bagasse can be utilised in the manufacture of packing paper, paper and paper board, cellulose and artificial silk etc. Molasses can be utilised in the manufacture of power alcohol, fertilisers, potash

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proved also to be important stumbling blocks. Transport facilities were inadequate and the transport policy was also defective. It has often been urged that schedules of railway rates charged in different railways have tended to discourage the development of industries in inland centres, and have actually favoured large-scale import of foreign goods and export of raw materials. The social atmosphere of the country is also to blame to a certain extent. It has discouraged large accumulations of capital, and the conservative atmosphere in the joint families has killed initiative and enterprise in many a young man. The high esteem on Government service attracted the best talents as it brought them into close proximity with the foreign rulers. The result was the dearth of really able men to develop the industries.

Several reasons have been advanced by the Indian industrialists to explain the slow rate of development of the industries. Before 1947, the main factor hindering industrialisation was the policy pursued by the government regarding the grant of protection. The policy of discriminating protection was adopted only from 1924. Before that year the Indian industrialists were unable to face the cut-throat competition of well-established foreign concerns. After 1924 the government no doubt adopted the policy of protection. But it was applied very haltingly, and investors and industrialists could not be sure of getting adequate protection from the government. After 1947 the position changed for the better with the advent of independence. But there have been two other factors sapping the confidence of the industrialists. One is the heavy rates of taxation levied by the government which do not leave adequate incentive for the development of new industries. Secondly, the labour policy pursued by the government since 1947 is an important factor making for the slow rate of development of industries. It has been urged that the labour policy of the present government is resulting in high labour cost, low output and considerable indiscipline among the workers.

The last two points have been much exaggerated. In every country efforts to introduce humane conditions of work for labour have not always been looked upon with good grace by the employers. The charge that the burden of taxation is crushing is also to be very frequently found in every decade. Income-tax

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The birth of the industry may be traced to the year 1828 when one Major Robert Bruce discovered the indigenous tea plants of Assam. In 1833 the government made its first attempt to cultivate tea by establishing an experimental tea garden at Lakhimpore in Assam. In 1838 the first consignment of tea was exported to London and in the next year, the government tea gardens were handed over to the Assam Company, the first tea Company in India. Since then the development of the industry has been very rapid. This was the first industry to feel the impact of British capital, which is still now dominant in the industry. About 60 p.c. of the total acreage under tea is owned by British companies, and of these, about 80 p.c. is controlled and operated by 10 managing agency firms of Calcutta. Another interesting feature is that the marketing of tea in Calcutta is controlled by 3 or 4 leading European firms, and the distribution of tea in the British markets, India's largest customer, is controlled by a small number of firms in the Mincing Lane.

Location. Among the states, Assam occupies the first place. It has 53 p.c. of the total acreage under tea in India and employs over half a million workers. Majority of these gardens are European-owned, Indians owning about 15 p.c. of the total acreage under tea in Assam. Next place is occupied by West Bengal, having 24 p.c. of the total acreage under tea, and employing over 2 lakh workers. South India contains 19 p.c. of the total acreage followed by the Punjab, the U.P. and Bihar, the last three containing only a small acreage under tea.

Structure. The tea industry combines both agricultural and manufacturing operations. The tea estates generally comprise large areas and belong mostly to joint-stock companies, though there are a number of privately owned gardens. The average size of an Indian garden is much smaller, being about 100 acres, than that of European-owned gardens which comprise about 800 acres.

The tea industry is remarkable from two points of view. First, it has successfully operated a Tea Control Scheme, aided considerably by government legislation. When the industry felt the impact of the world trade depression in the thirties, the producers of the tea industry in the leading countries met together and adopted a scheme for controlling the exports and

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INDUSTRIAL MANAGEMENT AND FINANCING

As in other countries the majority of large-scale industries run by private enterprise are operated by joint-stock companies. A most important characteristic of these companies is that they have been, almost invariably, organised under firms known as the managing agents. What are the features of this system, and how far has it fostered or hindered the industrial development of this country? It will be our next business to examine this very important question.

Managing Agency System: The managing agency system is a peculiar feature of the industrial organisation of India. A managing agent is a firm which is entrusted with the task of managing an industrial concern under an agreement with the parent company, subject to the directions of the Board of Directors. Though the system is peculiar to India, it is not an indigenous institution. It arose as the outcome of British trade relations with India. When the British capitalists began to invest capital in developing industries in India, they had to face one difficulty,—how to find, among the relatively small number of foreigners living in India, persons who could manage their concerns? The agency houses, formed by the ex-servants of the East India Company, took up this task and began to manage everything, including the supply of finance. The latter function was rendered easier on account of the fact that they were at that time acting as bankers. Hence they came to be known as managing agents. In course of time they began to float industrial concerns on their own responsibility, appointing themselves as managing agents. As the advantages of the system became apparent, it tended to become universal, and the Indian industrialists quickly adopted the practice.

Organisation and functions The managing agency firms have been organised in four different ways,—private firms, partnerships, private limited companies and public limited companies. At present there is a tendency towards converting other firms into private or public limited companies.

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made considerable progress under protection. The number of mills increased from 9 in 1925-26 to 16 in 1948 ; the total paid-up capital increased from only Rs. 95 lakhs to Rs. 2.25 crores. At present the productive capacity in the industry has been estimated at 1,36,600 tons and the existing mills are now in a position to meet the demand for writing and printing paper in the country.

The industry is divided into five sections *viz.*, printing, writing, newsprinting, packing and wrapping, and other sorts. Protection was granted only to the first two sections, which have developed as a consequence. The last war gave a great impetus to this industry and many new lines of production have been taken up. At present production covers such varieties as the manufacture of craft and boards like duplex and triplex boards, straw boards, tissue, air mail, bankpaper, bond, ledger paper and cartridges etc. The manufacture of newsprint has not yet been started, though certain measures have been taken for this purpose.

The industry is mainly located in West Bengal with an annual rated capacity of 58,500 tons out of a total of 1,36,600 tons. Next in importance comes Orissa with a rated capacity of 3,500 tons and Bihar.

The more important raw materials are bamboo and *sabai* grass. The board industry uses straw, grass and bagasse as the principal raw materials. The main problem before the industry is the shortage of raw materials, which has been accentuated to some extent by the partition of the country. The factories in West Bengal have been deprived of their supplies of bamboo previously obtained from East Bengal. Measures are being adopted for plantation of bamboo and for the development of *sabai* grass in the U.P. and the Panjab. The collection of waste paper, rags etc., should be more efficiently organised so that these subsidiary raw materials would also become available to an increasing extent. The Planning Commission has recommended the adoption of the following measures to improve supplies of raw materials :—(a) Reservation of specific forest areas and the grant of long-term bases for working such areas ; (b) price-fixation on an All-India basis for bamboo and grass to enable the industry to obtain regular supplies at reasonable prices ; (c) development of roads in forest

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This fact yields undoubted advantages in certain directions. When many concerns are under one management, there are obvious economies of buying and selling on a large-scale, secured by all these concerns. There are economies in the cost of maintenance of supervisory and technical staff. The same technical staff of greater ability and experience can be utilised for different concerns, and this is an important advantage in India where there is a dearth of technical talent. On the whole there is no doubt that the system has contributed a great deal to the promotion and financing of sound industrial concerns.

Defects But one must also remember the important defects of this system. Before 1936, when most of the managing agency firms were organised on a private or partnership basis, the children of the original agent automatically inherited their father's firm. While the father might have possessed great business ability, there was no guarantee that his children would also inherit the same efficiency. As a result, the concerns suffered on the death of the original founder. Secondly, many firms became managing agents because they possessed adequate financial resources. They are usually prone to give greater attention to the financial and commercial aspect of the operation of the concerns under their management, neglecting the technical side. This resulted in lowered efficiency. Thirdly, though the system secures some benefits of centralised buying and selling, there was no guarantee that these benefits would be passed over to the concerns. The resulting benefits have often been pocketed by the agents themselves. Fourthly, as regards the function of promoting of industrial concerns, it has been stated that many of the agents have been very conservative, imitative and unable to break new ground. Moreover, as there is seldom any co-operation between different managing agencies, the flotation of large enterprises requiring huge amounts of capital has become difficult.

But the greatest defect is concerned with the payment of remuneration to the managing agents. Before 1936, the managing agents received their remuneration usually in two forms, viz., a fixed sum on account of office allowance and a percentage on sale of output or profits. As regards the first method of payment, it has been urged that the industrial concerns have not always obtained full value for these expenses as

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the development of many new industries and to the expansion of existing ones.

In spite of this impressive progress, it must be admitted that industrial development has not been commensurate with the size or the resources of this country. This can be illustrated by reference to a number of criteria. It has been stated that one important index of industrialisation is the consumption of steel and heavy chemicals in a country. Per capita consumption of steel is only 8 lbs per year in India against 470 lbs in Australia, 520 lbs in Great Britain and 860 lbs in the U.S.A. Per capita consumption of Sulphuric acid is 400 times lower in India than that of the U.S.A., and that of soda ash is 100 times lower. Barely 2 p.c. of the working population of the country is employed in large-scale industries. The rate of urbanisation, another index of industrial development, is extremely slow in India, showing that India has yet to experience an industrial revolution on a scale to be found in Great Britain in the 19th century.

Another characteristic is that industrial development has proceeded at an extremely uneven pace in different directions. There are notable deficiencies in the Indian industrial structure. Only a few heavy capital goods industries have been properly developed. Industries manufacturing machineries and machine tools, or these using non-ferrous metals, electrical engineering, automobiles and tractors, prime movers and heavy chemicals are some of the basic industries which are either absent or inadequately developed.

Factors hindering industrial development : What are the reasons for such a slow and lop-sided development of industries in India ? A large number of factors such as inadequate supply of capital, which is again shy, dearth of men possessing the pioneering spirit, lack of skilled labour, have been mentioned by writers. A poor country like India does, of course, suffer from shortage of capital and of skilled labour. These are well-known handicaps and are to be found in all under-developed countries. The political bondage of the country has been an important factor hindering rapid industrialisation. The old Government of India was not always very keen on securing rapid development of industries in this country. The policy of free trade pursued by them and the vicissitudes of exchange policy.

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Attempts at reform In view of the well-known abuses of the managing agency system the government has made several attempts to remove some of its worst defects. The first attempt was made in 1936 at the time of the revision of the Indian Companies Act. Several amendments to that Act laid down a number of provisions or restrictions on the working of the system. In the first place it was laid down that no managing agent could be appointed with regard to a banking or insurance company. Secondly, no one could be appointed as managing agents of a company for more than 20 years, after which the agreement would have to be renewed at a meeting of the shareholders. Thirdly, to prevent packing the Board of Directors with the nominees of the agents, it was laid down that not more than one-third of the total number of Directors could be nominated by the agents. Fourthly, the remuneration of all managing agents appointed after the Act was to consist of a fixed sum of office allowance and a percentage of the net profits of the concerns, unless the shareholders decided otherwise. Thus payment of a commission on sale or output was prohibited in the case of all future managing agents. Fifth, no agent could employ the funds of a concern in the purchase of shares or debentures of any other company under the same management. The grant of a loan to, or the guaranteeing of loans of managing agents was also to be absolutely forbidden. Lastly, the managing agent would be debarred from carrying on a competitive business on his own account.

These provisions no doubt sought to do away with some of the worst abuses of the system. But they left many problems unsolved, many criticisms unanswered. For example, the rule that the remuneration of managing agents was henceforth to consist of a percentage of net profits was qualified by the expressed, "appointed after the Act". As a result, a large number of managing agents appointed before 1936 continued to receive their remuneration in the form of a commission on sale or output. In the meantime a number of cases occurred when the shares and rights of the managing agency firms were sold in the market, threatening a number of grave evils. This unrestricted transfer of managing agency rights might lead to the transfer of the management of concerns to incompetent or unscrupulous hands, which shareholders would be powerless to prevent. So the government had to intervene and in 1951

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EXERCISES

1. Give a brief history of the growth and state the present position of the cotton textile industry in India. What problems are being faced by the industry at present ?

2. Consider the present position and future prospects of the Jute Industry in India.

3. Give a short account of the Iron and Steel Industry in India. What steps are being taken by the Government to develop it and increase its targets of production ?

4. Give an account of the Indian Sugar Industry, indicating the factors that promoted its growth.

5. Describe the factors hindering the growth of large-scale industries in India.

"The industrial system in India is unevenly and in most cases inadequately developed." How do you account for this ?

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Abolition of the System ? Many of these recommendations have been accepted by the government and a Bill to that effect has been introduced in the Parliament in September, 1953. The provisions of the Bill follow closely the recommendations of the Committee. In the debate on the Bill in the Parliament a demand was made for the abolition of the system of managing agents. There is much to be said on both sides. The justification of the system lay in the conditions which existed in the early days of industrialisation. But these conditions have changed, while the newer managing agents lack the experience, technical competence and the financial resources of the old agency firms. The old fashioned type of men who have made some money in trade and commerce and gained some knowledge of industry by empirical methods of management are definitely an anachronism under modern conditions. In the opinion of many, it is not possible to remove the evils of the system by means of legislation, however elaborate it may be. Such legislation may easily be evaded, while too many restrictions may result in making the system rigid and inefficient. Hence abolition, not reform, is the proper policy to be followed in this case.

On the other hand the advocates of the system have pointed to the undoubted benefits conferred by it upon the country. It has been claimed on behalf of the system that companies with managing agents have on the whole yielded a far better return to the shareholders, greater production and higher contributions to the revenues of the government in taxation than those without managing agents. The system has not outlived its utility, but should be allowed to continue with necessary adjustments and proper safeguards.

Financing of industries : It has been one of the well-known complaints that the industrialisation of this country has been hindered for want of adequate finance. It is, therefore, necessary to examine this question at this place. We propose to start by discussing the present sources of supply of finance.

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development of industries. They organise and start a new concern, float shares for sale in the market, appointing themselves as managing agents. Almost all the important industries like jute, cotton textile, iron and steel, paper etc., have been organised by different firms of managing agents.

Secondly, they manage the day-to-day affairs of concerns under their control. They purchase raw materials and machineries, arrange for the sale of the products, and appoint the necessary staff.

Lastly, they also supply some finance to the industrial concerns. They buy or take up a portion of the shares or debentures in these concerns or provide long-term loans for financing schemes of extension or re-organisation. They have also supplied a part of the working capital either from their own funds or by guaranteeing loans from banks. Banks are not willing to grant loans unless these are backed by the guarantee of the managing agents. It is the good name of the managing agents which has induced investors in Ahmedabad and Bombay to deposit funds with industrial concerns and these deposits are utilised as working capital by these concerns. A number of managing agents have also extended financial aid to their concerns during emergencies or depressions often at serious inconvenience to themselves. Their part in financing industries was, therefore, substantial. But in recent years their contribution to the financing of industries is declining in importance.

Advantages: That the system contributed a great deal to the industrial development of this country may be readily admitted. During the early years of industrialisation they have borne the risks of pioneering and developing industries at a time when the prospects of industrialisation were comparatively unknown. Even at the present it is the managing agent's responsibility to nurse a venture into the profit-earning stage in the early years of a concern's life. Secondly, the managing agents proved to be a tower of strength to industrial concerns during depressions or bad times. The guarantee and financial standing of the managing agents have enabled these concerns to obtain loans from the banks on easy terms. Thirdly, the widespread prevalence of this system has resulted in the grouping of a number of concerns under unified control and management.

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Loans from banks provide a most important source of supply of finance, especially for working capital. Banks generally supply short-term loans against the security of the stock-in-trade, and often against the guarantee of the managing agents. The industrialists have complained that the volume of loans granted by banks is inadequate, costly and hedged in with many onerous conditions. Banks, in their opinion, are too conservative and seldom advance loans for long periods. Many of these criticisms are of course wrong, and we must remember that banks whose major resources consist of short-term deposits cannot afford to tie up their funds in long-term loans.

The smaller concerns among the large-scale business units sometimes borrow from the indigenous bankers and shroffs. But the latter generally charge high rates of interest and the burden of fixed interest payments weighs heavily on these concerns.

The industrial concerns also secure a portion of the needed finance from their managing agents. These agents subscribe to the shares and debentures at the time of initial floatation of the companies. Thus they supply a portion of the long-term funds, though they may subsequently sell out their shares and debentures to the public. They also supply some funds to meet the working capital needs, and grant occasional loans to the concerns under their management. They also have to guarantee loans taken by these concerns from banks. Some of the agents have extended financial help to concerns under distress, thereby enabling the latter to survive the crisis. While their services in supplying finance for industrial development are not negligible, it is desirable that in future industrial concerns should try to be independent of the managing agents.

In Bombay and Ahmedabad, the cotton textile industry secure a part of its working capital through public deposits. The mills accept fixed deposits from the public, and about 39 p.c. and 11 p.c. of the funds invested in these concerns were obtained from this source in Ahmedabad and Bombay. One serious defect of this method of finance is that the deposits are liable to be withdrawn by the public in panic during periods of distress when the need for funds is the very urgent. Thus reliance on this system of financing is not desirable.

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in many cases the amount of office expenses is much in excess of the actual sums spent by the agents. The system of giving the agents a commission on sale or output tended to lead to overproduction as the more is the output or sale, the more is the agent's commission, irrespective of the fact whether the concern earned any profit or not. The interests of the concerns have thus often suffered as a consequence. Moreover, if we consider the different ways in which the agents have made money out of the concerns, it would be evident that they realised too large a share of the profits. The natural consequence of such a situation has been to make investment in industrial shares less attractive to the ordinary investors.

The system has also been criticised on other grounds. The agents have usually a large number of concerns under their management. Many of them invested the surplus funds of one concern in the shares and debentures of other concerns under the same management. Reserves of several well-established mills have been frittered away by lending them to others newly started by the agents. To save weak concerns the agents invested the funds of the stronger ones, and this had often led to the ruin of the latter when the former collapsed. Thus the practice of inter-investment of funds led to grave evils. Moreover, there have been cases where some managing agents traded and speculated rather excessively with the funds of their concerns and the resulting weakness in their position reacted adversely on the financial condition of the concerns under their management. Many of them packed the Boards of Directors with their nominees and so virtually deprived the shareholders of any effective control over the concerns.

Lastly, it is argued that the system has resulted in an aggregation of industrial power in the hands of a small number of firms and has to that extent a monopolistic and anti-social trend. Dr. M. M. Metta has shown that among foreign agency firms Andrew yule and Mcleods control and manage more than 90 concerns ; Dalmias control 40 concerns ; J. K. industries 42 concerns ; Thapars 32 concerns and Birlas manage or control more than 2 dozen firms. The system has thus tended to concentrate wealth and economic power in a few hands and modern democratic tendencies have naturally begun to frown upon its continuance.

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The Committee has also made a number of other recommendations for increasing the resources of banks or for enabling them to grant more advances to industrial concerns. In the first place, the Reserve Bank should adopt a series of measures for cheapening and quickening the remittances of funds in the mufassil areas. This would enable banks to keep smaller cash balances in their branches, thereby enabling them to lend larger sums. Secondly, in the original Bill Market Scheme, the facilities granted by the Reserve Bank (i.e., rediscounting at $\frac{1}{2}$ per cent less than the Bank rate) were restricted to scheduled banks with deposits of Rs 5 crores or over. The Committee recommended that the facilities should also be extended to all scheduled banks with deposits of Rs 1 crore or over, and that the minimum amount of such bills eligible for rediscount should be reduced from Rs 1 lakh to Rs 50,000 and individual advances from Rs 25 lakhs to Rs 10 lakhs. Thirdly, to facilitate the opening of more branches in the rural areas and so to attract more deposits, the Reserve Bank should, in consultation with the government, work out a detailed scheme of financial assistance to banks desirous of opening branches. Moreover, the government should set up an Expert Committee to examine ways and means of rationalising the wage and salary structure in banks so that opening of more branches of banks might not prove onerous on account of high operating costs.

The Committee has also suggested that the indigenous bankers should reform their practices, and organise their banking business properly. Steps should also be taken to encourage the rediscounting of usance bills of indigenous bankers by the Reserve Bank through the scheduled banks.

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Recommendations of the Company Law Committee. The Committee expressed the opinion that the managing agency system might prove useful if its abuses and malpractices were removed. So it proceeded to make a number of recommendations to that effect.

First, they recommended that all existing managing agency arguments should expire on Aug. 15, 1959, and in future, no one could be appointed as a managing agent for more than 15 years at a time and the renewals would be limited to 10 years. Secondly, the managing agent could be removed from office by an ordinary resolution of the company in the case of fraud or breach of trust. In other cases a special resolution would be required. Thirdly, as regards the remuneration of the agents, their remuneration was not to exceed $12\frac{1}{2}$ p.c. of the net profits. No office allowance would be admissible, but the agents might charge any actual expenditure incurred by them on the maintenance of their office for the management of the concern. If the concerns earned no or inadequate profits, the agents would be entitled to receive a minimum remuneration to be determined at a meeting of the shareholders, subject to a maximum of Rs. 50,000 per year. The remuneration of all managing agents was to be brought in line with these recommendations within two years, thus closing the loophole of the Indian Companies Amendment Act of 1936. Fourth, though the inter-investment of funds was prohibited by the amending Act of 1936, this was evaded on many occasions. The Committee recommended that such investment, if made, should not exceed 10 p.c. of the subscribed capital of the company and 20 p.c. of the subscribed capital of all the investment companies in the group as a whole. Lastly, the Committee recommended a tightening up of the provisions relating to the powers of the managing agents to engage in competing concerns. The Committee also made a number of recommendations laying it

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Besides its paid-up capital, the IFC may accept deposits from the public repayable after not less than five years. The total volume of such deposits is not, however, to exceed Rs 10 crores. It may also sell bonds or debentures which may be guaranteed by the government as to the repayment of capital and interest. The total value of such bonds or debentures is not to exceed five times the amount of its paid-up capital and reserves.

The main function of the IFC is to grant medium and long-term loans to large industrial concerns, specially when such concerns are unable to secure funds through normal banking channels or through the issue of shares to the public. The IFC can lend only to public limited companies or to co-operative societies registered in India. It may provide accommodation to these concerns in three ways. First, it may make direct long-term loans or subscribe to the debentures of these companies. Such loans or advances must be repayable within 25 years, and the amount of loan to any single borrower must not exceed Rs 1 crore (it was Rs 50 lakhs in the original Act). Secondly, it may guarantee the loans to be raised by industrial concerns from the market. Thirdly, it may underwrite the issue of shares or debentures by industrial concerns, subject to the condition that if a part or whole of the underwritten capital remains unsubscribed by the public, these must be disposed of within 7 years. The IFC cannot directly subscribe to the shares or stocks of any company.

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The main function of the IFC is to grant medium and long-term loans to large industrial concerns, specially when such concerns are unable to secure funds through normal banking channels or through the issue of shares to the public The IFC can lend only to public limited companies or to co-operative societies registered in India It may provide accommodation to these concerns in three ways First, it may make direct long-term loans or subscribe to the debentures of these companies. Such loans or advances must be repayable within 25 years, and the amount of loan to any single borrower must not exceed Rs 1 crore (it was Rs 50 lakhs in the original Act) Secondly, it may guarantee the loans to be raised by industrial concerns from the market Thirdly, it may underwrite the issue of shares or debentures by industrial concerns, subject to the condition that if a part or whole of the underwritten capital remains unsubscribed by the public, these must be disposed of within 7 years The IFC cannot directly subscribe to the shares or stocks of any company

industries are to some extent different, and should be treated separately. We propose to study the financial problems of large-scale industries.

Financing of large-scale industries: An industrial concern needs finance for two purposes, *viz.*, initial finance for the purchase of land, construction of factories and other buildings, installation of machineries etc. A going concern needs finance for carrying out extensions, rennovations, modernisation of plants etc. The sums invested in these ways constitute its block or capital expenditure. Secondly, it requires finance for the purchase of raw materials, for the payment of wages, for marketing and other recurring items of expenditure. This is known as its working capital. To meet their capital expenditure, concerns need funds for long periods, whereas working capital requirements can be met from short-period funds.

Large-scale industrial concerns have so far attempted to raise their finance from the following sources, *viz.*, sale of shares and debentures among the public, loans from banks, funds supplied by managing agents, deposits from the public, indigenous bankers, and recently, the Industrial Finance Corporation. The government has also granted long-term loans to a few large concerns, *e.g.*, the Tata Iron & Steel Co., the Steel Corporation of Bengal etc.

For a concern organised on the joint-stock principle, the most usual source of finance is through the sale of shares and debentures in the market. In this way funds are raised from the investing public. While some companies have floated debentures with success, these are not usually favoured by our investors on account of a number of factors. As a result, the proportion of debenture capital is very small as compared to the total amount of share capital. Shares are now-a-days more popular. But the resources of the Indian money market are comparatively limited in view of the fact that the total volume of savings in this country is very small. Moreover, some of the savers are very conservative and prefer investment in land and government securities to that in the purchase of industrial shares. As a result, most of the concerns have not been able to raise enough capital by the sale of shares. In the Western countries, companies follow the practice of issuing enough share capital needed to meet the whole of their capital expenditure plus a large part of their working capital, but not so in India.

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speeches, the Chairman of the Corporation has tried to answer this criticism. The delay has often been due to the fact that the borrowing concerns do not comply promptly with the conditions regarding the grant of a loan, and that in the last two years attempts have successfully been made to speed up the procedure regarding the grant of loans. Thus according to the annual report for 1953-54, the IFC has sanctioned 29 applications in that year for Rs 5.27 crores as against 14 applications for Rs 1.43 crores, and on 30th June 1954 there were only 17 applications under consideration as against 41 a year before. This is no doubt encouraging.

One distressing factor revealed by the report of 1953-54 was that fewer industrial concerns went to the IFC for loans than in the proceeding years. The IFC received only 43 applications for loans, smallest number since 1948-49. Moreover, 11 applications were withdrawn this year against 4 applications in the previous year. This setback will also be evident from another fact. Whereas the IFC was able to pay the statutory dividend out of its own earnings in the year 1952-53, its earnings proved insufficient to pay the dividend in 1953-54. It is not a good sign that the institution would have to apply for subvention from the government in the 6th year of its working. Such subvention was meant to be needed only in the early years of its existence.

Of the three ways in which the IFC may give financial aid to industries, it has adopted only the first method. It has not underwritten the shares nor has it guaranteed the loans of any concern. Recently the Shroff Committee has made a number of recommendations to enlarge the scope of activities of the IFC. First the IFC should endeavour to give debenture-loans. Secondly it should explore the possibility of converting the whole or part of loan given by it into equity capital on mutually agreeable terms. Lastly, it should examine the scope for lending jointly with banks or guaranteeing advances granted by banks and insurance companies.

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Since the foundation of the Industrial Finance Corporation, larger concerns are getting long-term loans from this institution to enable them to finance extensions and renovations.

A review of the existing system. We have reviewed all the important sources for the supply of industrial finance for large-scale industries. There is a persistent complaint that these industrial units are hampered on account of the inadequacy of capital. The greatest difficulty is with regard to the supply of long-term capital. In respect of working capital the problem has not proved so acute at least in the case of large-scale units. The inadequacy of long-term capital is due to the small amount of savings available for industrial investment in a poor, under-developed country like India, and to a number of other ancillary factors such as adverse economic climate etc., which impede the flow of savings into industries.

Improvements in the system of industrial finance: In view of the complaints regarding the inadequacy of finance for industries, the Reserve Bank of India set up a Committee in 1953 to examine how increased finance could be made available to the private sector. The report of the Committee, known as the Shroff Committee, made a number of recommendations to this effect and we propose to examine them at this stage.

After reviewing the steps taken by the government and the Reserve Bank of India to increase the flow of funds for industrial development, such as the establishment of the Industrial Finance Corporation, the introduction of the Bill Market scheme, investment by the Reserve Bank in the share capital of Industrial Finance Corporations, promotion of sound banking practices etc., the Committee felt that with a number of other suitable adjustments in the Reserve Bank's lending and rediscounting practices, the commercial banks, insurance companies and other financial institutions would be able to make larger investments in private industry.

The Committee has rightly emphasized that the scope for direct long-term lending by banks must necessarily be limited in view of the fact that their resources consist mainly of deposits withdrawable on demand. But banks should adopt a more liberal policy forwards increasing their investments in the shares and debentures of first class industrial concerns, making larger advances to approved parties against such securities. They

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The Problem of Foreign Capital: One aspect of the small amount of savings in this country is that in the early days most of the industrial concerns were established by foreigners with foreign capital. As industrialisation proceeded, Indians came forth with some capital for investment in industries. But even at the present day foreign capital plays a significant role in financing industries in this country. A survey conducted by the Reserve Bank showed that on June 1948, the total foreign investment in India amounted to Rs 596 crores, of which the major portion (i.e., Rs 376 crores or 63 per cent) was supplied by Great Britain. The USA invested only Rs 30 crores and Canada Rs 9 crores. Among particular industries foreign capital is important in the jute industry, tea, coffee and plantation industries, mining industries, match industry, oil industry, soap industry, tramways and electricity undertakings etc. In recent years while a number of foreign concerns have sold their business to Indians, a considerable section of foreign companies has adopted the practice of converting their business into Indian companies with rupee capital, selling only a small portion of their share capital among Indians.

Before the advent of Indian independence, Indian opinion was definitely hostile to the entry of foreign capital. The most important reason for such a feeling was mainly political. The foreign businessmen, mostly Britishers, opposed the political advancement of this country. Moreover, it was feared that foreigners, if allowed to come in freely, would secure a stranglehold over the economic life of the country to the detriment of the real interests of the people. There were also a few cases where, as in shipping, foreign capital with its large resources established a monopoly and opposed the entry of Indian concerns often by adopting unfair business practices like rate-cutting etc.

There were also other ways in which industrial development by foreign capital did not always promote the interests of this country. Foreign businessmen usually employed their own nationals in positions of responsibility. Indians were employed only in the lower ranks, as clerks or peons. There was also some unwillingness to train up Indian apprentices in positions of trust and responsibility. Lastly, development by foreign capital meant that the profits, which were often large, were sent out of India and enriched other countries. Moreover,

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The insurance companies could also play a more important part in financing industries than they were doing at present. The Committee recommended that the Insurance Act should be suitably amended to enable these companies to invest up to 5 p.c. of their investible funds in any one company, and to invest in the shares and debentures of industrial concerns to a larger extent than before. The Act should also be amended to reduce the statutory minimum investment in government securities by insurance companies from 50 per cent to 45 per cent.

The Industrial Finance Corporation should also play a greater part in financing industries, and to facilitate this, the Committee has recommended that (a) the IFC should grant debenture-loans, (b) it should explore the possibility of converting the whole or part of a loan granted by it into share capital on mutually agreed terms, and (c) it should examine the scope for lending jointly with banks or guaranteeing industrial advances granted by banks and industrial companies.

Lastly, the Committee has stressed the need for setting up such institutions as issue houses, investment trusts, unit trusts etc., for mobilising financial resources. It has also approved the proposal to establish the government-sponsored Industrial Development Corporation.

The merit of this Committee is that it has recommended just those things which are the stock-in-trade of almost all writers on this subject.

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Government policy The government has announced a liberal policy for promoting an increased flow of foreign capital into this country. The Industrial Policy Statement of the Government of April 1948 and the Prime Minister's statement have sought to give assurances to foreign capitalists. Assurances have been given that (1) there would be no discrimination in the application of the general industrial policy between Indian and foreign firms. (2) The government would provide reasonable facilities for transferring profits and capital to other countries, consistent with the foreign exchange position of this country. And (3) if the government decides upon nationalisation of industrial concerns, it would pay fair and equitable compensation to the foreign investors. In return, it was expected that the major share in the ownership and management of these concerns should be granted to Indians, and that they should train up Indians increasingly to hold high technical positions of responsibility. Even with regard to some of these conditions, the government has made exceptions in the case of a number of foreign concerns. For example, in order to encourage the establishment of oil refineries, the government has permitted them to retain the major share in ownership and management, and has granted exemption from certain provisions of the Indian Companies Act and the Industries (Development and Regulation) Act. A guarantee has also been given against nationalisation for the next 25 years.

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A recent amendment to the IFC Act has sought to enlarge its resources and scope of functions. The IFC may now borrow from the Reserve Bank of India against government securities for short periods not exceeding 90 days, and also against its own bonds and debentures up to a maximum of Rs. 3 crores *and for periods not exceeding 18 months*. It may also borrow from the World Bank for financing the foreign exchange requirements of its borrowers and the government has been authorised to guarantee such loans. Thirdly, it may grant loans to shipping companies, and the maximum amount of any single loan was raised from Rs. 50 lakhs to Rs. 1 crore.

Review of the working of the IFC : The IFC has completed six years of working and its latest report (1953-54) shows that the Corporation has sanctioned loans amounting to Rs. 20.74 crores up to 30th June 1954. Of this amount the cotton textile companies received Rs. 3.07 crores, chemicals Rs. 2.44 crores, cement companies Rs. 2.35 crores, sugar factories Rs. 2.05 crores, paper industry Rs. 2.04 crores, ceramic and glass factories Rs. 1.35 crores, electrical engineering Rs. 1.29 crores. Loans granted to cotton textile, woollen, paper and silk mills were utilised mostly for modernisation and renovation of plant and for expansion. Some portions of the loans were also utilised for strengthening the resources for working capital. The Corporation sanctioned in all 137 applications for loans, of which 68 applications for Rs. 9.70 crores were for new undertakings and the rest (Rs. 11.04 crores) was taken by old established concerns. Thus it will be seen that the major portion of loans has been for improving the productivity of existing industries. The major portion of application (78) was for loans not exceeding Rs. 10 lakhs, and 57 applications were for loans for sums between Rs. 10 lakhs and Rs. 50 lakhs.

To secure funds, besides its paid-up capital, the Corporation borrowed Rs. 7.80 crores by issuing bonds and debentures, and Rs. 1.23 crores from the Reserve Bank. It has not taken any deposits from the public.

The IFC has come in for a good deal of criticism. First, it has been urged that the IFC takes a long time to sanction a loan and that there is also considerable delay before the sanctioned loan is paid to the borrower. In successive

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THE STATE AND INDUSTRIAL DEVELOPMENT

Government's industrial policy before 1947 : Throughout the whole of the 19th century the Government of India followed in general a policy of *laissez faire*, and except in the case of a few industries did practically nothing to foster the development of industries in this country. The only exceptions are the tea industry and the railway industry, where the government took some positive steps to encourage their development. A change took place in the 20th century with the establishment, in 1905, of a separate Department of Industries and Commerce by the Government of India. The two Provincial Governments of Madras and the U P adopted a more positive policy of active participation in the development of industries and started a few factories and granted loans to others. This aroused the hostility of the European business interests, and at their instigation the Secretary of State, Lord Morley, deprecated such activities on the part of the governments concerned. Then came the first world war when for the first time the government felt that the development of at least some industries was essential from the military point of view. The result was the appointment of an Industrial Commission by the Government of India. That Commission, in its report, urged the government to adopt a more positive policy towards industrial development. In the meantime the government had set up a Munitions Board for the purpose of buying army requirements as far as possible in India. This gave same stimulus to the growth of industries, especially those catering for the war materials. Following the recommendations of the Industrial Commission, the different Provinces started separate Departments of Industries, and passed State Aid to Industries Acts under which the government granted long-term loans to small-scale industries for their growth and development. In 1922, the Government of India established the Indian Stores Department, and this Department was entrusted with the task of buying goods required by different departments of the government from Indian manufacturers. Meanwhile a Fiscal Commission was appointed to examine the question of the proper tariff policy.

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The institution sponsored by the World Bank will have an ordinary share capital of Rs. 5 crores, the major portion of which is to be held presumably by the scheduled banks, insurance companies, and other institutions without government or Reserve Bank participation. A part may be held by non-Indians if the latter are willing to come forward. The World Bank will grant a long-term loan of Rs. 5 crores, subject to a guarantee by the Government of India. The U.S. government will also allow Rs. $7\frac{1}{2}$ crores of counter-part rupee funds realised from the sale of steel under the TCA Operational Agreement in the form of special stock without any voting rights or right to dividend. This special stock is to be paid off in equal instalments after 15 years but within 30 years. The total initial resources of the Corporation would thus amount to Rs. $17\frac{1}{2}$ crores.

The main function of the proposed Corporation will be to finance the expansion and modernisation of existing industries and to encourage and promote the participation of private capital, both internal and external, in Indian industries.

The government-sponsored National Industrial Development Corporation has not yet been finalised. It is reported that it would be a private institution owned by the state with an initial capital of Rs. 1 crore. Other funds, as necessary, would be provided by the government. Its primary aim would be to encourage the setting up of risky, large, capital-consuming projects which the private sector is unable to develop. A basic feature of the scheme is that industries started by this Corporation would be gradually transferred to the private sector when these become fully established.

While there is ample room for such institutions, care should be taken to see that these do not compete with one another or with the IFC, which is also designed to provide long-term capital to private industry. It is, therefore, necessary to have clear ideas about their respective fields of operation. As the IFC has so far confined itself to providing loan capital, the best course for these Corporations would be to specialise in the provision of equity capital for industrial concerns. They should work in co-operation with stock exchange firms so that the new issues might receive greater public response.

The institution sponsored by the World Bank will have an ordinary share capital of Rs. 5 crores, the major portion of which is to be held presumably by the scheduled banks, insurance companies, and other institutions without government or Reserve Bank participation. A part may be held by non-Indians if the latter are willing to come forward. The World Bank will grant a long-term loan of Rs. 5 crores, subject to a guarantee by the Government of India. The U.S. government will also allow Rs. $7\frac{1}{2}$ crores of counter-part rupee funds realised from the sale of steel under the TCA Operational Agreement in the form of special stock without any voting rights or right to dividend. This special stock is to be paid off in equal instalments after 15 years but within 30 years. The total initial resources of the Corporation would thus amount to Rs. $17\frac{1}{2}$ crores.

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(the private sector) The manufacture of arms and ammunitions, the production of atomic energy, railways would remain exclusively under the public sector. Actually the state already own all units in these industries and private enterprise is unlikely to be interested in these lines. Secondly, such industries as coal, iron and steel, aircraft manufacture, ship-building, manufacture of telephone, telegraph and wireless apparatus (excluding radio-receiving sets), and mineral oils would belong to the public-cum-private sector. Government proposed to set up new units in these lines. Existing concerns would be allowed to operate for a period of ten years at the end of which the position was to be reviewed. Lastly, a large number of other industries like salt, automobiles and tractors, generation and distribution of electricity, electrical engineering, heavy chemicals, fertilisers, non-ferrous metals, rubber manufactures etc., would be left to private enterprise, subject to the control and regulation by the state in certain matters. For example, the state proposed to regulate the licensing and location of factories, and to adopt certain measures for improving labour conditions and for ensuring satisfactory labour-capital relations etc.

Regarding aid to private enterprise, the statement added that the tariff policy would be suitably modified to protect industries against unfair foreign competition, while promoting the utilisation of India's resources without imposing unjustifiable burden on the consumers. Similarly, the system of taxation would be readjusted in such a way as to encourage saving and productive investment.

Attention is also to be paid to the development of cottage and small-scale industries and for this purpose, the government proposed to set up a Cottage Industries Board. The government would also examine the question how far and in what manner these industries could be co-ordinated and integrated with large-scale industries.

This policy has been vigorously criticised by the industrialists on the ground that it held out vague threats of nationalisation and so would hinder the development of industries by private enterprise. The statement says that the question of nationalising existing units would be reconsidered at the end of 10 years. It has been claimed that this is too short a period during which private enterprise would not think of

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foreign concerns naturally gave the first preference to considerations of profit to the neglect of the real interests of the country. The important but limited supplies of minerals were exported to other countries in the raw state, no attempt being made to manufacture them locally. Metallurgical coal was exported in large quantities as it fetched good profit. While it ought to have been conserved in the real interests of the country.

If foreign capital is brought in the form of share capital, control over the industrial concerns would then remain with foreign firms, a step which might not always be desirable. If it comes in the form of loans it becomes a very rigid and costly method. The borrowing country has then to set apart large sums, every year, to pay interest and to find large sums of foreign exchange when repayment falls due.

But when everything is said against foreign capital, one must also mention its good points. There is scarcely any under-developed country which has been able to develop its resources in the initial stages without the aid of foreign capital. The United States started on its industrial career with the help of British capital. The political objection is no longer serious as our National Government is now quite competent to adopt suitable steps for the protection of the real interests of the country. It is also putting pressure on foreign concerns to appoint and train up more and more Indians in the higher posts, and the pressure is already bearing fruit to some extent. If foreign capital is allowed to develop any industry, profits would no doubt be taken away from the country. But this is a price we must pay for securing industrial development at a faster rate than would be possible solely with our own meagre resources. Moreover, foreigners bring with their capital technical know-how, without which it would not be possible to develop our industries. They have taught us the art of business management and helped in creating an industrial atmosphere which has been an important factor in luring Indian capital into industrial development. One must not forget the fact that foreign capital has borne the initial risks of industrial development. A number of them lost their capital before others succeeded and we have been able to benefit from their losses and mistakes. It has constructed the railways and other means of communication, without which industrialisation would have been postponed further.

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Thirdly, the Act authorises the government to take certain punitive measures against industrial concerns which are found guilty of certain offences. If, at any time, the government finds that there is likely to be a substantial decline in production or deterioration in quality or an unjustified rise in prices, or that concern is being managed in a manner likely to cause serious injury or damage to the interests of the consumers, it may make an investigation and issue appropriate directions to the concern regulating its production or controlling prices etc. If the government finds that it is not carrying out these directions, it may take over the management of the concern. When, however, the purpose of the order is fulfilled, the government may cancel the order and return the concern to the owner.

Lastly, the government was also authorised to establish a 30-man Central Advisory Council, consisting of members representing the interests of owners, workers, consumers and others. The main function of the Council would be to advise the government on matters relating to the regulation and development of industries.

The provisions of the Act have been criticised by the business interests. It has been urged that it places large and undefined powers of regulation over industries in the hands of the government. Even with the best of intentions, the machinery of the government is extremely slow and halting, and the consequent delay involved in the grant of licenses would often create difficulties in the way of new industrial units. Moreover, there are, and have been no reasons why the government should require similar power for established industries like sugar, cement, tea, paper etc., as it wanted for new industries. The provisions authorising the government to take over the management of a concern in the event of certain happenings have also been criticised as being too drastic. The Act "is

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EXERCISES

1. Discuss the merits and demerits of the Managing Agency System in India.

"Although in the initial stages the Managing Agency System played an important role in the development of industries in India, it has several drawbacks." Discuss.

2. What steps have been devised in recent years to improve industrial management in this country? Comment on the recent legislation on the subject.

3. Examine the proposals of the Company Law Committee for reforming the Managing Agency System.

4. Describe the sources of supply of capital available for the development of industries in India. What measures would you suggest for improving the system?

5. Give a critical account of the organisation and functions of the Industrial Finance Corporation.

6. Write notes on the organisation and functions of the proposed Industrial Development Corporations.

7. Discuss the scope of foreign capital in the economic development of India to-day. What are the sources from which foreign capital may be obtained?

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These enterprises have been organised in different forms. (a) Some like the Posts and Telegraphs etc., are managed departmentally by government officers responsible to the Ministers concerned (b) Others like railways are organised under specialised boards, consisting of a small number of men who are experts or officials in these concerns (c) The autonomous public corporation form of organisation has also been adopted, for example, in the case of the DVC (d) In some cases separate companies have been formed, consisting of the government and important industrial concerns to run the concern This is the case with the Machine Tools Factory and the Hindustan Steel Ltd, etc

State Trading: Under the impact of modern conditions, governments in many countries had to assume a number of trading functions This tendency become specially prominent during the last world war when special institutions were set up in different countries for the bulk purchase or sale of different commodities The British government established the U.K. Commercial Corporation and the U.K. Raw Cotton Commission The Government of India had also to undertake a number of trading functions for the bulk purchase of food-grains in foreign countries and their imports into India. Technically the term, State Trading, implies the import or export of commodities by the state or state-owned agencies on a monopolistic basis with a view to their re-sale

During the last world war the Government of India had to exercise a complete monopoly over the import of food-grains, fertilizers, steel, non-ferrous metals, raw cotton etc Though this was done by government departments, there was constantly a talk of setting up a special agency to handle the import and export of a number of commodities The questions of setting up such an organisation was referred by the government to a Committee in 1949, and the Committee issued its report in 1950.

The Committee on State trading recommended the setting up of a State Trading Corporation which should be an autonomous body with an authorised capital of Rs 10 crores and an initial capital of Rs 2 crores The Central Government should hold 51 p.c. of the shares, the rest to be subscribed by the State Governments and private investors The Board of management was to consist of government representatives and of practical

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The first Fiscal Commission recommended the adoption of a policy of discriminating protection according to which industries were to be granted protection provided that they satisfied three conditions. This was accepted by the government and between 1924 to 1939, a number of industries such as the iron and steel industry, the cotton textile industry, paper industry etc, were granted protection by the government. But the policy of protection was carried out only half-heartedly.

During the second world war the government was forced to take some interest in the development of industries. They announced certain modifications in the policy of protection and gave a guarantee that industries established to meet war requirements would be protected in a suitable manner after the war. A Board of Scientific and Industrial Research was set up for conducting research on industrial problems. The need for adopting an economic plan for the development of industries was accepted by the government.

The advent of independence in 1947 changed the whole position. The government is now increasingly conscious of the need for fostering industrial development. To carry out this objective, the government announced, in April 1948, its industrial policy.

Government's industrial policy: The present industrial policy statement was issued by the government in April, 1948. The statement points out the extent to which the state would itself own and manage industries, and the extent to which it proposed to exercise general control and supervision over the private sector. It also seeks to lay down the different ways in which the government proposed to extend aid to industries left to private enterprise.

The ideal envisaged by the statement is a sort of mixed economy in which both state-managed units and private enterprise would each play their part in the industrial field. The statement divides industries into three groups, *viz.*, industries to be wholly owned and managed by the state (the pure public sector), industries in which both state-managed units and private forms would exist side by side (the public-cum-private sector), and lastly, industries to be left to purely private enterprise, subject to the control of the government

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But such state trading may also be attended with grave risks. In the first place, state trading involves centralisation of trade in the hands of one organisation. This would result in the severance of connections between domestic and foreign traders—connections which have been developed over a long period of time. Tastes and habits vary from one area to another and different types and qualities are needed to satisfy the demand in different consuming areas. Individual importers are often accustomed to drawing supplies from particular exporters or importers. Centralised buying would disrupt these normal channels of trade and the existing pattern of distribution. The disadvantages resulting therefrom would undoubtedly outweigh any possible benefits from state trading.

It has, for example, been complained that the state trading in raw cotton in the U.K. has resulted in mills being compelled to buy unsuitable types and qualities of raw cotton. Under a system of decentralised, competitive imports, the importer is in closer touch with the market than a State Trading Corporation could be. Secondly, the private importers are often able to cover their purchases by hedging or by sales in view of the comparatively small amount of their individual transactions. But when a State Trading Corporation enters into a bulk purchase, it may be able to cover such a large transaction by hedging or by sales to domestic buyers. When losses are anticipated a private trader may be able to act quickly and cut losses, but a State Trading Corporation will not be able to do so easily. It has also been stated that bulk purchase of imports, instead of securing lower prices, has, on the other hand, resulted in pushing up prices in the selling centres or export markets. Moreover, in spite of the bulk purchase of food-grains during and after the war, the Government of India was not able to secure any material price advantage. If state trading is to yield the maximum price advantage the Trading Corporation must be able successfully to anticipate world trends in prices. It may be exceedingly difficult for a single institution to perform this function effectively, and any mistake would have adverse effects throughout the whole economy. Unless it becomes necessary on account of exceptional conditions, the best agency for this purpose is not State Trading, but the co-operative wholesale marketing organisation.

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The Industries (Development and Regulation Act of 1951: In the Industrial Policy Statement of April, 1948, the government stated that in regard to certain groups of industries to be left to private enterprise for development the government would retain some control over their working. A Bill embodying the government's proposals regarding the regulation and development of these industries was later introduced in the Parliament, and finally passed in 1951. In order to emphasize that the purpose of the Act is not control, it was called Industries (Development and Regulation) Act.

The Act provides, in the first instance, for the licensing of factories. All persons wanting to start a factory with a capital of more than one lakh of rupees would be required to take a license from the government. All existing factories would have to take a license within 6 months from the date of enforcement of the Act.

Businessmen carrying out substantial extensions to their factories would also have to apply for license. Before granting a license the government may impose certain conditions as to the location of the factory, the minimum standards as to the size of the factory etc.

Secondly, the Act authorises the government to set up Development Councils for any industry or groups of industries included in the schedule of the Act. This Council is to consist of persons representing the interests of businessmen, workers, and consumers and of persons possessing special knowledge (technical or other aspects) of the industry. It will be the duty of each Development Council "to increase the efficiency of the industry, to improve or develop the service that it renders or could render to the community." For this purpose, it is to suggest norms of efficiency for obtaining maximum production;

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Whatever the validity of arguments on both sides, there can be no doubt that the present is not a suitable time to carry out the policy. We should now devote more attention to branch out into new directions, opening out new fields than waste time and energy in acquiring existing units in industries which have already been developed.

EXERCISES

1. Describe the policy pursued by the government towards the development of industries. Are you in favour of the state's taking a more direct share in the industrial development?

2. Comment on the Industrial Policy Statement issued by the Government of India.

3. Critically discuss the main provisions of the Industries (Development and Regulation) Act of 1951.

4. Discuss the merits and defects of State Trading. Do you support the establishment of a State Trading Corporation?

What is the justification for State Trading in India?

5. Discuss the desirability or otherwise of nationalising Indian industries at the present moment.

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EXERCISES

1. Describe the policy pursued by the government towards the development of industries. Are you in favour of the state's taking a more direct share in the industrial development?

2. Comment on the Industrial Policy Statement issued by the Government of India.

3. Critically discuss the main provisions of the Industries (Development and Regulation) Act of 1951.

4. Discuss the merits and defects of State Trading. Do you support the establishment of a State Trading Corporation?

What is the justification for State Trading in India?

5. Discuss the desirability or otherwise of nationalising Indian industries at the present moment.

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Much of this criticism is unfounded. The provisions regarding the taking over of a concern are meant to be applied to extreme cases, and ample safeguards (*e.g.*, consultation with the Central Advisory Council etc.) have been incorporated to prevent abuse. As regards the positive powers of determining the location, minimum size etc., these are essential if industrial development is not to proceed in a haphazard manner in the future. The planning of future development on sound and balanced lines cannot be secured without some system of licensing of new units and control over the location etc., of new undertakings. The powers under the Act are essential if private enterprise is to act in conformity with the social and economic policy of the government.

State-owned enterprises: The state in India has owned and operated business concerns from early periods. The oldest of such concerns was the Posts and Telegraphs, a concern which is managed departmentally. The first industrial enterprise to be owned and managed by the state in India was the railways and certain factories for making munitions. The last war brought a great development in state enterprises. The government was forced to adopt state trading projects embracing almost the entire wholesale and most of the retail trade in foodgrains and other commodities in scarce supply. The end of the second world war witnessed the establishment of a number of important state enterprises. Several multi-purpose irrigation projects were started, of which the Damodar Valley Corporation was set up by an Act of the legislation as a semi-autonomous Corporation. In addition, the government established a number of industrial concerns like the Sindri Fertilizer Factory, the Chittaranjan Locomotive Factory, the Machine Tools Factory in Mysore, the Hindusthan ship-building yard at Vishakapatnam, and the Hindusthan Steel Ltd., at Rourkela in Orissa, the Hindusthan Aircraft Factory at Bangalore etc. The different State Governments have also adopted the policy of nationalisation of Road Transport, and special organisations have been set up to take over the road transport concerns. Some states have also started miscellaneous undertakings like the Haringhata Milk Supply Scheme etc. Lastly, the former States of Mysore, Hyderabad etc., also run a number of state enterprises.

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protection should be *discriminatingly* granted. All industries applying for protection should not be protected. But a careful selection was to be made, and only those industries were to be given protection which showed possibilities of development in the near future. Each application for protection was to be thoroughly examined by a Tariff Board, composed of experts on the subject. The Commission laid down three conditions which should be satisfied by the applicant industries before the Tariff Board could recommend them for protection.

(a) The industry must be one possessing natural advantages, such as the abundant supply of raw materials, cheap labour or large home market.

(b) It must be one which, without the help of protection, is not likely to develop as rapidly as is desirable in the interests of the country.

(c) It must be one which will be eventually able to face world competition without protection.

Apart from these, there were two other groups of industries which deserved special consideration by the government, *viz.*, industries essential for national defence, and key industries. (i.e., industries whose products were used as raw materials by other industries). Moreover, industries which obeyed the law of increasing returns, and those which would be able to meet the needs of the whole market would deserve special consideration.

This was the famous "triple formula", which came in for a good deal of criticism at the hands of subsequent writers. It was claimed by the Fiscal Commission that this would enable India to develop her industries while avoiding the dangers attending a policy of protection. If properly carried out, it would protect only those industries which possessed comparative advantages and would soon develop into adults.

As a result, the burden on the consumers would be smaller, and there would be no danger of encouraging inefficient industries.

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businessmen. It would undertake activities like the promotion of the export trade in the products of cottage industries, and should also handle the export and import of other commodities like food-grains, fertilizers, raw cotton etc.

There is no doubt that certain advantages would follow from the establishment of such a State Trading Corporation. It would, then, be possible to secure a more effective enforcement of grading and standardisation of commodities for export. It is well-known that one of the principal difficulties hampering our export trade is the lack of suitable grading and standardisation. It would be easier to introduce proper grading and standardisation if the export trade is handed over to the Corporation. Secondly, such a Corporation could adopt special measures for the promotion of export trade in different markets. It can, for example, use national banking, shipping and insurance services, thereby encouraging the development of such services in the country. Thirdly, it would enable the government to fulfil its contracts formed with other countries under different bilateral trade agreements, specially in cases where private enterprise might face to import or export on the required scale. Fourthly, such state trading is necessary from the point of view of the planning of our foreign trade. Any plan for the economic development of the country would involve regulation of imports. As our foreign exchange resources would be limited, we would have to exercise careful economy with regard to the import of both essential and non-essential goods. Such a restriction of imports could of course be achieved by the present system of import control. But the method of import control in this country has given rise to many difficulties on account of frequent changes of policy, overcentralisation, inadequate appreciation of the needs of trade etc. A State Trading Corporation might avoid these defects. Lastly, state trading means centralised buying of imports or centralised marketing of exports. Such bulk purchase or sale would yield some saving through the elimination of middlemen's commissions. It would also enable this country to keep import prices at a reasonable level, or to practise discrimination in different export markets. India's collective buying capacity is a fairly important factor in the world market in the case of many commodities, and so it would enable her to procure imports at more favourable prices.

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24,000 tons to 67,000 tons and of sugar from 24,000 tons to about 1 m tons during the same period. The expansion of many of these industries yielded considerable benefits to cultivators. For example, the acreage under sugarcane increased from 26 lakhs in 1930-31 when protection was first granted to the sugar industry to nearly 36 lakh acres. Secondly, the grant of protection enabled these industries to remain comparatively unaffected during the world trade depression, when all other industries suffered considerably. Many of these protected industries were able not only to maintain, but actually to increase their volume of production during the major part of the depression. A third way in which this policy conferred benefits was through the development of other industries. A number of other small industries (starch, chemicals etc) have developed in the country, due no doubt to the availability of steel and steel products manufactured in India and to the existence of industries like paper, cotton textiles etc, which provide a market for their products. As regards the burden on the consumers, the Fiscal Commission of 1949-50 has, after an examination of the different aspects, come to the conclusion that "on balance the direct and indirect advantages to the community of protection of these major industries offset the burden on the consumers."

Criticism of the policy of discriminating protection. This policy came in for serious criticisms. In the first place, there were certain procedural defects. The government made the first mistake by not appointing a permanent Tariff Board. They appointed *ad hoc* Boards which could not take a long view of the growth of industries, or accumulate experience and build up an efficient body of technique and procedure. Moreover, the procedure that was followed involved a good deal of delay and uncertainty. The government took a long time to consider an application and to refer it to a Tariff Board. When that Board submitted its recommendations often after protracted enquiry, the government again took a long time to arrive at a decision. Such delays caused difficulties and uncertainty to the industries.

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The Problem of Nationalisation of Industries: The Industrial Policy Statement of April, 1948 laid it down that with regard to the majority of the basic or key industries, the question of nationalising them was to be held in abeyance for the next 10 years after which the position was to be reviewed. In India already a number of industries are under public ownership, such as the defence industries, and the railways. The state has also started a few factories for the manufacture of locomotives, fertilizers, machine tools etc. The question, then, arises with regard to the nationalisation of the basic or key industries like the coal industry, the iron and steel industry etc. It is claimed that the state should acquire all existing units in these industries.

Those who argue in favour of nationalisation of the basic industries usually point to the grave economic inequalities and the many social problems which arise under private ownership of the important means of production. State ownership of these industries would tend to minimise these problems and result in securing a greater equality of incomes. There are also special reasons for nationalising particular industries. For example, it is well-known that the organisation of the coal industry in India is extremely inefficient. Most of the mines are of uneconomic size and so are not in a position to adopt cost-reducing measures like mechanisation etc. In view of the limited reserves of metallurgical coal, conservation of such coal is essential in the national interest. But such conservation could not be carried out properly so long as the industry remained in private hands. Thirdly, the question has assumed importance in India on account of the fact that many of the basic industries are under foreign management. There is, for example, a demand for nationalising the jute industry on the ground that the jute mills, being dominated by foreigners, have exploited the jute-growers who are completely unorganised and so helpless.

Those who oppose this policy generally point to the delays and inefficiencies of public administration. State management ultimately means management by public officials who are notoriously fond of red tapism, and who do not usually possess the same incentive in managing a concern efficiently as is possessed by private owners under the spur of profit motive. Moreover, there is a dearth of trained personnel in this country, and

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War-time Changes in the Fiscal Policy: The last war gave a stimulus to the development of a number of new industries and the government gave a promise that the case of these "war" industries would be sympathetically considered when the time came for the grant of protection. In November, 1945, the government appointed a Tariff Board to investigate the claims of these industries for protection or assistance. The conditions for the grant of protection were sought to be liberalised, and the Tariff Board was asked to base itself on the following :—

(1) "that the industrial units are established and conducted on sound business lines, and

(2) (a) that, having regard to the natural or economic advantages enjoyed by the industry and its actual or probable costs, it is likely within a reasonable time to develop sufficiently to be able to carry on successfully without protection or state assistance, or

(b) that it is an industry to which it is desirable in the national interests to grant protection or assistance and that the probable cost of such protection or assistance to the community is not excessive" In making its recommendations the Board was to give due weight to the interests of the consumers and to consider how their recommendations would affect the industries using the products of protected industries. Protection or assistance was to remain in force for 3 years

These conditions marked a slight improvement over those laid down by the first Fiscal Commission. The condition 2(a) combine. all the three principles laid down by that Commission. The condition 2(b) where the Board was asked to consider national interests was of course an important change. But the limitation of the period of protection to only 3 years was a serious handicap as the protected industries would then be faced with considerable uncertainty. Three years was too short a period for the adoption of any consistent policy.

But realising that most of these industries organised during the war had to work under serious handicaps, the Tariff Board gave a liberal interpretation to the terms of reference. During the period of 5 years this Board conducted enquiries in 90 cases (as against 51 enquiries between 1923-31), and the government

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FISCAL POLICY AND INDUSTRIAL DEVELOPMENT

If we study the history of industrial development in different countries we shall find that the vast majority of them granted protection to their industries at least in the initial stages. This was the case in Great Britain, Germany, Japan etc. The U.S.A. is even now protecting her industries heavily against foreign competition, though she is one of the foremost industrialised country in the world. What part has the policy of protection played in encouraging India's industrial development?

It should be remembered that when, from the middle of the 19th century, industries began to grow up in India one by one, the government was dominated by free trade ideas. So import duties were levied for purely revenue purposes, and no attempt was made to grant protection to Indian industries. There was, however, a persistent demand in India for the adoption of a policy of protection. The Government of India had ultimately to yield and appointed in 1922 a Fiscal Commission to examine this question. The majority of the Commission advocated a policy of discriminating protection, which was accepted by the government. A minority advocated the adoption of a stronger policy of protection.

Discriminating Protection : The Fiscal Commission recognised that there was ample justification for the adoption of a policy of protection in India. They laid special emphasis on the need for the grant of protection for the development of (a) industries essential for purposes of defence and (b) young industries which showed promise of future development. They also pointed to the necessity for securing a diversification of industries to reduce our excessive dependence on agriculture and one or two industries.

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All other industries have been divided into three sub-groups, viz, (a) industries for the development of which the plan gives high priority, (b) industries which are complementary or ancillary to the basic and key industries in the planned sectors, and (c) other industries

When an industry falling in this category applies for the grant of protection, the Tariff Commission was to apply two main conditions, viz,

"Having regard to the economic advantages enjoyed by the industry or available to it and its actual or probable cost of production, it is likely within a reasonable time to develop sufficiently to be able to carry on successfully without protection or assistance, and/or

it is an industry to which it is desirable in the national interest to grant protection or assistance and having regard to the direct and indirect advantages, the probable cost of such protection or assistance to the community is not excessive"

These conditions may be relaxed if the development of any industry is included in the Plan. In addition to these conditions, the Fiscal Commission gave its opinion on certain specific issues for the grant of protection. First, the fact that any particular raw material or raw materials needed for an industry are not available within the country should not provide an agreement against the grant of protection, provided that the industry possesses other economic advantages. Secondly, in determining the comparative advantages possessed by an industry, not only its home market, but any possible export market should also be taken into consideration. Thirdly, ability to satisfy the needs of the entire home market should not be regarded as a condition for the grant of protection. It should be enough if the industry was in a position to meet the demand of a sizeable section of the home market within a reasonable time. Fourth, in so far as other industries use the products of the protected industry as raw materials, they should be granted "compensatory protection", depending on the nature of the raw materials produced, the proportion that the cost of raw materials bears to the total cost of production of the industry, the nature of the additional burden likely to be imposed and other connected considerations. Fifth, as regards new or embryonic industries,

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which actually received protection as a result of these enquiries was eleven, *viz.*, iron and steel including subsidiary steel industries, cotton textile industry, paper and paper pulp, matches, salt, heavy chemicals, sericulture, magnesium chloride, plywood and tea-chests, gold thread and sugar industry. The Tariff Board's recommendations for the grant of protection were rejected by the government in six cases. The Board rejected ten applications for protection. Of the protected industries, protection to the heavy chemicals industry was granted only for a year and a half, and that to the plywood industry was so altered that it received very little actual assistance. After the war protection was withdrawn from all industries with the exception of the Match and Sericulture industries.

There is no doubt that the Iron and Steel Industry justified the protection granted to it. In the paper industry, the production of printing and writing paper has developed to such an extent that no further protection may be required for this section when imports are freed from control. In the case of the sugar industry, development was almost phenomenal after the grant of protection, especially in respect to installed capacity and production. But regarding the lowering of costs the gains achieved have been almost negligible during these years. The case of the Match Industry is interesting on one account. It has no doubt expanded considerably after the grant of protection. But when the industry applied for the grant of protection, it was divided into two sections—an Indian sector producing two-thirds of the total production and a foreign sector controlled by the Swedish Match Trust. The application for protection came from the Indian sector which wanted protection against both imports and the foreign concern. In 1948, the Swedish Match Trust, known as the Western India Match Company, produced nearly 90 p.c. of the total output, while about 200 other Indian units produced the rest.

A review of the policy of discriminating protection during these years would show that in spite of all its defects, the policy enabled this country to secure three important benefits. In the first place, there was no doubt that the protected industries were enabled to increase their production by substantial amounts. Thus the output of steel ingots increased from 131,000 tons in 1922 to 1,042,000 tons in 1939, that of matches from 16 m. gross to 26 m. gross, of paper and paper board from

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competitive prices. Its primary advantage is that it does not raise prices and does not impose any direct burden on the consumers. But instead of the consumers, it is the tax-payers who bear the burden of protection in this case. But there are important administrative disadvantages as the payment of subsidies requires careful control over the volume and quality of production. Under the method of quantitative restrictions, the government restricts the amount of imports of the foreign product to what it considers safe or reasonable quantities. Like the method of import duties, it also raises prices and may lead to the exploitation of domestic consumers by monopoly organisations, whether of foreign or domestic origin. Administrative measures include the manipulation of railway and shipping rates against imports, restrictions and prohibitions on imports on various pretexts under the Sea Customs Act etc.

The Fiscal Commission accepted the fact that the main reliance was to be placed on the method of import duties. The method of quantitative restrictions should, in their opinion, be used only sparingly, say, for temporary periods against abnormal imports. Subsidies are of course desirable, and for this purpose they recommended the creation of a Development Fund by the government which should set aside every year a portion of the revenues collected from protective tariffs. Subsidies could be granted from this Fund and the Commission expected that the creation of this Fund would remove some of the difficulties attending the method of subsidies and enable a consistent and continuing policy to be pursued from year to year.

Obligations of protected industries: The grant of protection imposes considerable burden on the consumers. In return the protected industries have also some special obligations to the community. The Fiscal Commission rightly points attention to these obligations.

First, the price policy of these units must be reasonable. If, however, the price rises and continues to stay above the reasonable level determined by the height of the protective duty, the government should take steps to regulate them.

Another obligation is with regard to the maintenance of the quality of the products in accordance with suitable standard specifications. Thirdly, an industry receiving protection should

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this was interpreted rather rigidly, resulting in a refusal of protection to many deserving industries. For example, the government refused to accept the Tariff Board's recommendations for granting protection to the glass industry or the worsted section of the woollen industry on the ground that essential raw materials were not available in the country. There are many cases of flourishing industries which import their raw materials from foreign countries. The locomotive manufacturing industry was denied protection in 1924 on the ground that the home market by itself was not large enough. But insistence on this condition ignores the possibilities of an export market, which, together with the home market, may open up prospects of economic production. Moreover, if the first condition is satisfied, the third becomes superfluous. The second condition was a "truism" as no industry was likely to apply for protection if it was in a position to develop against foreign competition without the help of protection.

Thirdly, the insistence by the Commission that only industries already established should be given protection gave rise to a serious defect. An industry may possess large possibilities of development. But the promoters may hesitate to give a start without some promise of the grant of protection against foreign competition. Given that promise and fulfilment, the development of the industry may proceed at a rapid rate. But the government could not hold out such a promise according to the conditions laid down by the Commission.

The most fundamental defect of the policy recommended by the Fiscal Commission lay in the fact that they viewed protection as an instrument for enabling particular industries to withstand foreign competition. They failed to visualise protection as an instrument for securing general economic development. This has resulted in a lop-sided development of industries. The development of a particular industry is often dependent on the growth of other industries. Protection of particular industries without a positive effort being made to develop allied industries at the same time might have increased the total burden on the community. The problem of industrial development should be viewed as a whole, and the policy of protection should be treated as forming a part of an economic plan designed to secure the simultaneous and co-ordinated development of all the resources of the country.

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The reports of the Tariff Commission should contain an adequate analysis on which all their conclusions are based. They should present a clear picture of the over-all cost to the community of the protective duties and of any economic and social benefits that may be expected from the policy of protection.

EXERCISES

1 Examine critically the nature and working of the policy of discriminating protection

2 What is the new concept of protection adopted by the Indian Fiscal Commission of 1949-50? Explain in this connection the criteria which should be applied in considering applications of industries for protection

3 "The Indian Fiscal Commission of 1949-50 approached their task from a new angle of vision and laid down new principles of protection" Elucidate this statement.

4 Discuss the functions of the Tariff Commission

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has in most cases promptly announced its decisions within two months. The Board recommended the grant of protection to 38 industries including aluminium industry, soda ash, textile machinery, bicycles, electric motors, caustic soda and bleaching powder etc. It is too early to assess fully the result of the protection granted to these industries.

The New Fiscal Policy : In the Industrial Policy Statement of April 1948, the government expressed its intention of reconsidering the tariff policy so as to make it an effective instrument for preventing unfair foreign competition and for promoting the utilisation of the country's resources without imposing unjustifiable burdens on the consumers. In pursuance of this policy, the government appointed a Fiscal Commission in 1948 to examine and report on the future fiscal policy. The Commission submitted its report in 1950 and made a number of recommendations on the proper fiscal policy designed as to fit into an overall plan of economic development.

The report of the Commission laid down new principles of protection. The policy of protection is now to be looked upon, not as an instrument for protecting particular industries against foreign competition, but as an important means for promoting the economic development of the country. This policy must be related to an overall plan of development of resources.

The Fiscal Commission then laid down certain fundamental principles on which the new scheme of protection was to be based. First, the different industries are to be grouped into three classes, *viz.*, (i) defence and other strategic industries, (ii) basic and key industries and (iii) other industries.

In regard to the first group of industries, they should be established and maintained with whatever degree of protection or assistance that might be necessary. Defence is greater than opulence.

In regard to the basic and key industries, the question of protection was to be left to the discretion of the Tariff Commission which would also determine the form and quantum of protection or assistance to be given to them. If development of any of these industries is included in the national plan, this should provide enough justification for the grant of protection.

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Such lop-sided development of industries has some adverse economic consequences. The concentration of industries in five states to the neglect of other regions has led to widely different money incomes and standards of living in the country. These are highest in the two most industrialised states, while they are lowest in the comparatively backward states like Orissa, Assam etc. It is desirable that the benefits of industrialisation should be widely distributed all over the country, and should not be monopolised by a few states. Secondly, the congregation of industries in a few cities has given rise to serious evils. It has led to bad housing conditions, heavy congestion in transport and other public utility services and the consequent deterioration in public health. Thirdly, such congregation is also bad from another point of view. Bombing of these cities would disorganise the economic organisation of the country.

Hence it is necessary to take steps to change the location of industries. There is no reason why more sugar factories should be allowed to be established in the UP and Bihar, which already possess a large number of such factories, and which are not ideally suited for the cultivation of sugar, and not in Madras or Bombay, where the climatic conditions are more suitable for cane cultivation. Such dispersal of industries, where possible, is also desirable for the sake of strategic reasons. If industries are dispersed over the whole country, and not concentrated in big cities, the danger of aerial bombing would be lessened to that extent. Lastly, control over the location of industries is essential for a wider dispersal of the benefits of industrialisation over the different parts of the country.

A tendency towards a wider dispersal of industries has become evident during the last 3 decades. Between 1921 to 1939, the share of Bengal in the total number of factory workers declined from 35 p.c. to 29 p.c., that of Bombay from 25 p.c. to 23 p.c., while the share of Madras increased from 8 p.c. to 10 p.c., and that of the UP from 6 to 8 p.c. The cotton textile industry has also exhibited the same trend. Of the new mills, a larger number were being established in other states, away from Bombay. The same tendency is also to be found in the case of other industries like the sugar industry.

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the Tariff Commission should examine the facts and estimates relating to the industry and the nature of foreign competition it is likely to encounter, and then advise the government as to the assurance of protection to be given to the promoters of new industries. The need for such an assurance may be particularly strong in the case of industries requiring heavy capital outlay or involving a high degree of specialisation and plant equipment. Lastly, protection may also be granted to agricultural commodities subject to the following considerations, *e.g.*, the number of such commodities should be small and should be selected on the basis of their relative importance and the volume of employment they offer. The grant of any protection should be accompanied by the adoption of a programme of agricultural improvement, and it should be limited to short periods, never for more than five years at a time.

These principles, combined with the proposal to appoint a permanent Tariff Commission, are no doubt comprehensive and will remove many of the defects of the policy of discriminating protection. They lay emphasis on the fact that the question of the grant of protection should be subordinated to the needs of the economic plan for the all-round development of the resources of the country. Of course it must be admitted that the first of the two conditions laid down for the grant of protection to industries falling in the third group contains the essence of the "triple formula", and if it is as rigidly interpreted as in the case of the policy of discriminating protection, it would have led to almost the same results. But the specific issues discussed by the Commission and the insertion of the second condition rob it of much of its rigidity. And there will be no danger if the policy of protection is carried into effect against the background of the economic plan.

Methods of protection: Protection to an industry may be granted by levying import duties, by the grant of subsidies, by the application of quantitative restrictions, and by certain administrative measures.

The levy of import duties is the most usual method that is generally followed. Its chief defect is that it raises prices and imposes a burden on the consumers. Subsidies are financial grants given by the government to the manufacturers in the protected industry in order to enable them to sell at

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The dictionary meaning of rationalisation is the application of reason to industry and the elimination of waste in labour, time and materials. As such it has always been present throughout industrial history. Industrial development has always proceeded through the adoption of methods designed to eliminate waste, and increase output and efficiency. But the word, "rationalisation" became specially prominent during the twenties of this century, in Germany and the U.K., when it became associated with the attempt to eliminate surplus capacity in an industry through the closing down of uneconomic units and concentration of production in the more efficient units. As such it resulted in a series of amalgamations and capital reconstructions in different industries, and some substitution of labour by modernised plant.

In India, the need to introduce methods of rationalisation in different industries was increasingly felt in the thirties. At that time the majority of industries were faced with declining demand on account of the Depression and a search was being made to secure a reduction in costs to compensate for the fall in prices. In 1932, Tariff Board on the Cotton Textile Industry came to the conclusion that Indian mills were using more labour per unit of capital than was the rule in Japan or the U.K., as a result of which the cost of production was higher in Bombay than in the latter countries. Following the recommendations of the Tariff Board the Bombay Millowners' Association attempted to introduce schemes of rationalisation, most of which, however, failed. The outbreak of the war stopped all this, a situation which lasted so long as there was a sellers' market. But the emergence of a buyers' market in recent times with its declining demand has again given rise to talks about the need for introducing rationalisation in different industries, such as the cotton textile industry, jute industry, coal industry, sugar industry etc.

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The list is not exhaustive, and the Commission recommended that it should be the function of the Tariff Commission to review the operation of protected industries from time to time to see whether they were carrying out their obligations. It was also to recommend suitable measures to the government for securing enforcement of these obligations in cases where they were being neglected.

Tariff Commission : The Fiscal Commission suggested the appointment of a Tariff Commission, which was to be a permanent body, consisting of five members including the Chairman. The Commission may co-opt assessors or advisers for particular purposes. The necessity for such a quasi-judicial authority in any scheme of tariff protection is now so universally recognised that the case for it needs no elaboration.

The Tariff Commission is to be entrusted with the following functions. First, it shall conduct enquiries when an industry applies for protection, or enquiries connected with allegations of dumping or enquiries for variations of protective duties or for tariff concessions under Trade Agreements. Secondly, it shall conduct enquiries into the effects of tariffs on the level of prices and cost of living or on other significant facts in the country's economy. Thirdly, it shall carry on investigations into the manner of working of tariffs, or into the price policy of the protected industries, or into any anomalies that may result from the working of protected duties etc. Lastly, apart from these *ad hoc* investigations, the Tariff Commission shall also carry out a periodical review, preferably at the end of every 3 years, on the working of protective duties. These reviews should deal with the manner in which the obligations imposed on protected industries have been discharged, and the defects and deficiencies from which the protected industries are

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Combination movement in industries: In the western countries industrial development has been followed by the growth of monopolistic organisations. The same tendency has also been present in India. On account of the prevalence of the Managing Agency System, the combination movement has taken mainly the form of concentration of ownership and control in the hands of a few firms. Of the large number of industrial firms in India, more than 600 of the largest industrial establishments are controlled by a small number of Managing Agency firms. Of these, more than 250 industrial establishments are under the control and management of nine leading British firms, viz., Andrew Yule, Mcleod, Martin and Burn etc. In the cotton mill industry, more than one-third of the productive capacity is in the hands of less than 30 Managing Agents. In Ahmedabad, 18 leading families control over four-fifths of the productive capacity in the cotton textile industry. Of the 85 jute mills working in India, 33 are controlled by 4 managing agency firms, and about one-fourth of the installed capacity in this industry is controlled by 2 British firms, Andrew Yule and the Mcleods. In the coal industry, 4 firms of managing agents control about 30 companies. In the tea industry, Duncan Bros., a British managing agency firm, controls 25 tea companies, and in all 128 tea companies are under the management of 11 firms.

Apart from this concentration of management and control in the hands of a few firms, another characteristic has been the concentration of industrial power in the hands of comparatively small number of persons. As Dr. M. M. Mehta pointed out, nine leading families of India held nearly 600 directorships or partnerships in Indian industries.

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CHAPTER 24

SOME INDUSTRIAL PROBLEMS

Location of industries: In the study of the location of industries, we examine the areas in which different industrial units have been established in the country, and then try to find out how far these are properly distributed from certain points of view. In theory businessmen are supposed to set up their factories in those places where their cost of production including the cost of transport is the minimum. But in practice they are not always guided by purely rational or economic considerations. Moreover, what may appear to be the best location from the point of view of businessmen may not actually be the most suitable in the national interests.

During the last hundred years a large number of industrial units have been established all over the country. Businessmen have followed their own considerations or instinct in selecting the places where to locate their factories. The result has been the heavy concentration of industries in the two states of Bombay and Bengal. In 1939, as much as 59.2 p.c. of the total number of factory workers were to be found in these two states. Since then there has been some tendency to set up industries in other areas. But even then in 1951, Bombay and West Bengal contained 54.3 p.c. of the total factory workers in India. If we include 3 other states, *viz.*, U.P., Madras and Bihar, these five states contained in 1951 88.4 p.c. of the total number of factory workers in India. The result has been that industrial development has been extremely uneven and lop-sided.

Not only are the industrial units concentrated mostly in two states, they have also tended to cluster round the two great cities of Calcutta and Bombay. The population of these cities has, as a result, increased by about 100 p.c. during the last 20 years. This is due partly to the concentration of industries, and partly to the influx of population from the rural areas. The large refugee population has also tended to move towards these cities as on account of the concentration of industries they provide the largest volume of employment in the country.

CHAPTER 24

SOME INDUSTRIAL PROBLEMS

Location of industries: In the study of the location of industries, we examine the areas in which different industrial units have been established in the country, and then try to find out how far these are properly distributed from certain points of view. In theory businessmen are supposed to set up their factories in those places where their cost of production including the cost of transport is the minimum. But in practice they are not always guided by purely rational or economic considerations. Moreover, what may appear to be the best location from the point of view of businessmen may not actually be the most suitable in the national interests.

During the last hundred years a large number of industrial units have been established all over the country. Businessmen have followed their own considerations or instinct in selecting the places where to locate their factories. The result has been the heavy concentration of industries in the two states of Bombay and Bengal. In 1939, as much as 59.2 p.c. of the total number of factory workers were to be found in these two states. Since then there has been some tendency to set up industries in other areas. But even then in 1951, Bombay and West Bengal contained 54.3 p.c. of the total factory workers in India. If we include 3 other states, *viz.*, U.P., Madras and Bihar, these five states contained in 1951 88.4 p.c. of the total number of factory workers in India. The result has been that industrial development has been extremely uneven and lop-sided.

Not only are the industrial units concentrated mostly in two states, they have also tended to cluster round the two great cities of Calcutta and Bombay. The population of these cities has, as a result, increased by about 100 p.c. during the last 20 years. This is due partly to the concentration of industries, and partly to the influx of population from the rural areas. The large refugee population has also tended to move towards these cities as on account of the concentration of industries they provide the largest volume of employment in the country.

CHAPTER 25

LABOUR SUPPLY AND EFFICIENCY

Throughout the whole of the 19th century organised industry suffered from a shortage of labour. This was due to a variety of factors. In that century growth of population was not very rapid, and the supply of land was not exhausted. Hence workers had to be attracted to the factories. Unfamiliarity with work in factories and the extremely unsatisfactory working conditions in factories,—all these were important factors in causing labour shortage. Moreover, certain industries like the tea plantations, coal mines etc., were situated far away from the usual centres of population, and these had to adopt special measures for the recruitment of labour.

Hence industries had to adopt special methods for securing an adequate supply of labour. Conditions have, of course, changed for the better for the vast majority of industries. The jute mills, the sugar and cotton mills, for example, are now able to get labour at the factory gates instead of sending men to the distant villages to bring recruits. But this change in the conditions of supply has not led to any significant change in the methods of recruitment of labour.

Methods of recruitment: Unlike other countries the existing methods of recruitment exercise some influence on labour efficiency and welfare. This is due to the existence of certain peculiarities in these methods which will be obvious as we study them one by one.

The most usual method of recruitment is through a class of intermediaries known as the jobber, mistries or sardars. They are generally old workers promoted from the ranks after full experience in the factory. They recruit all labour required by the mill. Intending applicants have to approach them for a job, and their recommendation is also necessary for securing a promotion. Jobbers may also perform other functions, such as supervision of labourers at work, keeping the machinery in order etc.

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the paper industry etc. In other words many of these industries are tending to move towards the consuming centres.

State control over location: This tendency has got to be encouraged and speeded up. The state in India has, therefore, been obliged to take steps to influence the location of future industrial units. The Industries (Development and Regulation) Act of 1951 authorises the Government of India to control the location of new factories. Under that Act, promoters of new factories would be required to take a licence from the government, and at the time of the grant of the licence, the government may lay down conditions regarding the location of the plant. By refusing to grant licences for new units, the government may thus prevent new factories being established in regions which it considers to be more or less saturated.

This power is, however, negative. Under this Act, the government may prevent new sugar mills from being established in Bihar. But it has no power to direct that such a factory is to be set up in Madras. This power may be used to prevent further concentration of industries in particular states or cities. But it will not enable the government to secure a better distribution of industrial units.

There are critics who are sceptical of the merits of state control over the location of industries. If a businessman selects a wrong site for the location of his factory, he will have to bear the loss. If he has to locate his factory on the orders of the government and cannot work it profitably, he can naturally claim that the government should bear the loss, or at least a part of it. Selection of business sites by government officials who are not well-versed in business matters is more likely to lead to wrong selections than when this is done by businessmen themselves.

Moreover, there are limits to the possibility of shifting industries to the under-developed areas. For example, industries which are raw material-oriented like the Iron and Steel industry can only be established near the sources of raw materials.

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Employment Exchanges: The Government of India started a number of employment exchanges mainly for the re-settlement of the demobilised personnel from the armed forces. The scope of activities of these exchanges has since been widened to include all classes of unemployed persons, and a number of private employers utilise the services of these exchanges for the recruitment of their staff

There is a great need for extending the scope of operations of employment exchanges. The number of such exchanges should be increased and there should be at least one employment exchange in all industrial centres where representatives of employers and workers should be associated in an advisory capacity. Japan also suffered from similar difficulties regarding the recruitment of labour, and these were solved to a large extent by the organisation of employment exchanges

The Shiva Rao Committee, appointed by the Government of India in 1952 issued a report in 1954 suggesting a plan for the reorganisation of employment exchanges. The Committee has rightly recommended that the employment exchange organisation should be developed into a full-fledged national service on a permanent footing with much enlarged powers. It recommended a wide range of functions for such exchanges, viz., registration of all applicants, selecting and referring suitable applicants to employers and maintaining placement records, collecting information regarding employment opportunities and making such information available to workers etc. Government and semi-Government Departments should be required to recruit the required staff through these exchanges. As regards private employers, the Committee recommended that firms engaged on government contracts, concerns in which governments hold a part of the stock or grant subsidies or other aid should be required compulsorily to notify to the exchanges all vacancies other than vacancies for unskilled labour, temporary vacancies and promotions. The suggested measure of compulsion may be embodied in a suitable legislation with powers to the government to determine which particular categories of industries should be brought under the Act.

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introduction of rationalisation in that industry through the replacement of its worn-out machinery by modern equipment. The report of the Working Party on the coal industry (1950) has also advocated rationalisation through the amalgamation of smaller collieries to form bigger units and through increased mechanisation.

In general, it would be fair to say that to-day in India the management favours rationalisation, while labour opposes it. Rationalisation is looked upon as a method for eliminating waste in production and for increasing output and improving efficiency. For this reason it is generally favoured by the producers. The opposition of labour is due to the fear, or almost certainty, that rationalisation would lead to considerable unemployment. Any change in organisation or method which eliminates waste of time or labour tends to have the immediate effect of throwing some workers out of employment. The general feeling among the labour leaders is that in India where capital is scarce, and labour is plentiful, there should be no resort to methods of production which seek to utilise more capital and less labour. Moreover, even if it is admitted that rationalisation would lead to increased efficiency, lower prices, higher standard of living and so to more employment, these are, more or less, long-period effects. But in the long run we are all dead, and these arguments provide no consolation to workers facing immediate unemployment. So in this conflict between the short-run and long-run effects of rationalisation, labour very naturally takes the short-run dangers into account, unless the state or some other authority steps in and provides compensation to the unemployed, or makes alternative arrangements for their employment.

So a compromise is necessary in the interests of all parties. Labour must realise the inevitable fact that unless methods of rationalisation are adopted in different industries, costs of production cannot be reduced to the competitive level. The long-term maintenance of a high level of employment in each industry, the development of new avenues of employment and the improvement in the general standard of living,—all depend on the attainment of the highest level of efficiency by the Indian industry. Such levels of efficiency cannot be achieved except through the introduction of methods of rationalisation. But

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Some writers have also pointed attention to the migratory habits of the Indian worker and the high rate of labour turnover in the factories as being important causes of low efficiency. Most of the workers have migrated from the rural areas. They retain their link with the village homes and land and try to go back as often as they can to the villages. They are prone to look upon factory work as a disagreeable necessity, and so fail to strive to their utmost capacity for gaining efficiency. But such migration to the villages has also important beneficial effects. As the Royal Commission on Labour pointed out, the village home is a refuge and security in sickness and in maternity, in strikes and in lockouts, in unemployment and in old age. The occasional visits to the village provide the worker with cheap holiday in familiar surroundings and so improve his health. Hence migratory habit cannot always be regarded as a factor leading to inefficiency.

The Indian factory worker is supposed to have a fancy for changing the factory as often as he can. This and his migratory habit are responsible for the high rate of turnover of labour in the factories. If labourers frequently leave a factory, this causes great difficulties for the management who has, as a consequence, to select new employees most of whom may be inexperienced or completely new to the factory. They are likely to damage machines and materials. As a result, average productivity becomes smaller than would be the case with a constant labour force.

Two most important factors in high productivity of labour are the supply of good raw materials and the proper planning of production processes including the layout of the factory. Indian management is not always careful about the quality of raw materials to be used in the factory. Poor quality of raw materials leads to low output. Similarly the use of old, worn-out machinery in many of the Indian factories is an important cause of low production.

Working conditions inside the factory itself and the degree of comfort provided for the worker also play a very large part in production. Such things as the percentage of humidity, the temperature, the lighting, spacing in the factory, the condition of the air and the amount of fibre or other materials floating in

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Instances of combinations formed by the fusion of many firms are also to be found in India. The most prominent monopolistic organisation is the Swedish Match Trust, which, through its Indian subsidiary, the Western India Match Company (WIMCO) now produce more than two-thirds of the total production of matches in India. It owns and operates a large number of factories in Bombay, Calcutta, Madras, Panjab and the U.P.. In the cement industry, the biggest combination is the Associated Cement Co., Ltd. (A.C.C.), which was formed in 1936 by the amalgamation of 11 cement companies. Since then A.C.C. has set up three more factories. In all, A.C.C. controls 15 cement companies, and its rival, the Dalmia Group, controls 5 cement Companies.

Some combinations have also been formed by the amalgamation of managing agency firms, while the individual concerns under their management were allowed to retain their separate existence. This tendency became prominent after the Second World War. Thus the British India Corporation Ltd., a gaint British managing agency firm, acquired in 1946 the business interests of Messres. Begg Sutherland & Co., Ltd. leading to the concentration of management of 19 concerns. Similarly, in the same year, another two leading British managing agency firms, Jardine Skinner Ltd. and George Henderson & Co., combined to form one organisation in the name of Jardine Henderson Ltd.

It must, however, be admitted that the growth of combinations has not yet proceeded so far as to secure a stranglehold over the industries, except in the Match industry. The tendency is of course present, and has got to be watched carefully.

EXERCISES

1. How far is the existing location of industries satisfactory ? Do you advocate state control over the location of industries ?

2. Examine the case for the rationalisation of industries in India, laying adequate stress on the difficulties of such rationalisation.

3. Comment on the nature and extent of the combination movement in Indian industries.

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2 Examine the different systems for the recruitment of labour in India. Describe the part played by employment exchanges in this connection.

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something for securing, and also for retaining a job. This reduces the already low earnings of workers and so leads to lower efficiency. This method also leads to the large labour turnover in our industries. The larger the labour turnover, the larger the number of available jobs and so greater becomes the possibility of earning bribes. For these reasons the Royal Commission on Labour recommended the abolition of this system.

A second method of recruitment is through contractors. A factory needing workers looks to the contractors who supply the required number of labours and receive commission for their services. This system prevails in railways, coal-mining and other mining industries etc. From the point of view of the employers this system has the merit that it ensures a steady supply of labour and relieves the management of a lot of trouble regarding labour. But its disadvantages are more weighty and numerous than its merits. It enables the employers to escape most of the provisions of labour legislation as contract labour is not directly employed by the factory. So the factory owner might disavow all responsibility for such workers. But the greatest defect is that this method leads to sweated labour. Contractors are mostly middlemen interested in making the maximum profit for themselves and this they do by overworking labour. A contractor for labour, chosen because he is the lowest tenderer, is also likely to pay the lowest rates of wages. There is no doubt that this system should also be given up as early as possible.

A third method is recruitment through labour officers. A large number of jute mills and other factories have appointed a number of labour officers in charge of a Labour Bureau for the recruitment of labour. This method has good potentialities, and can be used to eliminate the jobber and the contractor. But in many cases, especially in jute mills these officers serve only as a screen behind which the system of recruitment by jobbers still continues.

Mention must also be made of the system followed in the Madura Mills Co., where the management sends notice of vacancies to the labour union. In some cases the management has started the practice of recruiting through the employment exchanges.

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Minimum Wages Act The Minimum Wages Act (1948) was passed for fixing minimum wages in certain selected industries, where workers were in receipt of exceptionally low wages on account of the lack of or weaknesses of the trade union organisations. The provisions of this Act are applicable to industries like tea plantations, oil mills, rice mills, flour mills, motor transport, tanneries etc., and agriculture, which have been mentioned in the schedules. Excepting the plantations and agriculture, all others are minor industries. The State Governments have, however, the power to add to the list of industries. No minimum wages are to be fixed in an industry which employs less than 1,000 workers. In agriculture, minimum wages are to be fixed within 3 years; in all other industries within 2 years. The period has, however, been extended by subsequent amendments.

The Act lays down the following machinery for fixing minimum wages. The State Government may itself publish proposals for fixing minimum wage rates in an industry; or it may appoint a committee to hold enquiries and suggest minimum wage rates. These are then to be published in the Gazette and shall come into force at the end of 3 months. Wage rates so fixed are to remain in force for not more than 5 years after which they are to be revised. Before any revision is to be made, the Government shall appoint Advisory Committees to advise it on the extent of revision. For the purpose of co-ordinating the work of these Committees, the State Government shall set an Advisory Board. The Central Government may also set up a Central Advisory Board for advising the State and Central Governments in matters of fixation and revision of minimum wage rates. All these Committees and Boards are to consist of an equal number of representatives of employers and workers of each industry, and a number of independent members (not exceeding one-third of the total number of members). All members are to be appointed by the government which shall also select one of the independent members as the Chairman.

The government may fix minimum wages for time or piece-work. It may also fix different minimum rates for adults, women, children and apprentices or for different classes of work or for different localities. A minimum wage rate may consist of a basic rate with or without a cost-of-living allowance, and

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play an important part in assuring better employment of manpower resources and so in raising national productivity.

Efficiency of Labour : That the average worker in India has a comparatively low efficiency has become one of the most common statements in economic writings. Labour efficiency is measured by the output per man-hour, *i.e.*, the output which a worker produces on average in one hour. Many attempts have been made from time to time to measure such efficiency as against that in some of the western countries, of course in every case to the disadvantage of the Indian worker. Thus one witness expressed his opinion before the Industrial Commission of 1918 that a cotton mill worker in Lancashire was about four times as efficient as his prototype in India. The Tariff Board on the Cotton Textile Industry, reporting in 1926-27, came to the conclusion that while a worker attended to 240 spindles in Japan, 5 to 6 hundred spindles in the U.K. and 1,120 spindles in the U.S.A., the Indian worker attended to only 180 spindles. Instances can be multiplied. The fact remains that on average, the Indian worker is less efficient than the workers in industrially advanced countries.

What factors are responsible for such low efficiency ? Certain causes are well-known, such as the climatic conditions of this country, the poor physique of the average worker and the prevalence of diseases among them. Workers with their absurdly low standard of living have to live on an unsatisfactory diet in a thoroughly insanitary bustee. If the worker has to spend his night in a small room with wife and children, parents and other co-tenants all through the year, and in some cases cook his food there, he cannot get sound sleep or sufficient physical and mental rest as is necessary for one who has to put in hard and sustained physical work. How much of his physical and mental energy would, then, be left for efficient production in the factory ?

A second group of factors have to do with the illiteracy of the average worker. Most of them lack any technical training. In other countries there are now industrial workers who can claim traditional skill in handling machinery etc., handed down to them through several generations, while in India only a small percentage of workers can claim such skill or technical training.

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In India, the most important factor in fixing minimum wages has been the Report of the Central Pay Commission (1947). After expressing its conviction that the state must take some step towards fixing minimum wages on the basis of the principle of living wage, the Commission, however, felt that this might not be possible in the initial stages. So as a first step it sought to fix minimum wages related to the normal wage level prevailing in the country. The Commission recommended a minimum basic wage of Rs 30 per month. This report constitutes as a landmark as the principles and practices recommended in it came to be accepted as authoritative by almost all subsequent adjudicators.

Adjudicators have also sought to pay attention to the principle of the capacity of the industry to pay. But this has been done, more or less, for the purpose of ascertaining whether the wages recommended by them on other considerations were within the capacity of the industry or the industrial concern. This principle formed mainly an indirect test as to the possibility of a certain wage recommended rather than a positive factor deciding the actual level at which to fix wages.

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The various Committees set up under the minimum wages Act have also emphasized the first two principles. Most of them have adopted the definition given by the Fair Wage Committee that "the minimum wage must provide not merely for the bare sustenance of life, but also for the preservation of the efficiency of the worker, by providing some measure of education, medical requirements and amenities." But as the minimum wage determined on this basis was beyond the financial capacity of these industries it has to be scaled down. In practice, therefore, the legal minimum was fixed at as high a point as the industry could hope to bear in normal times.

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Remedies : Once we know the factors responsible for low efficiency, it is comparatively easy to prescribe remedies. The housing conditions, the diet and medical facilities should be considerably improved. Greater provisions should be made to impart general and technical training to the workers, and the governments should start an increasingly large number of technical institutes. The institution of sickness insurance and provident fund schemes, and better housing are expected to lead to a lower rate of turnover of labour. Above all, there is an imperative necessity for improving the efficiency of the management as a whole. The Development Councils should set up organisations to study productivity of labour and to suggest ways and means of improving it. If rationalisation is carried out carefully so as not to cause large-scale unemployment, productivity of labour is likely to increase in the long run.

Productivity of labour in recent times : One of the most frequent complaints heard is that the average productivity of labour has declined materially over the post-war years. For example, the Chairman of the Tata Iron & Steel Co., has stated in his annual report of 1949 that the average output of steel per worker has declined from 24.36 tons in 1939-40 to 16.30 tons in 1948-49. In the coal industry, while the number of workers employed during the decade ending 1951 has gone up by 58 p.c., output has increased by only 32 p.c. In the Cotton Textile Industry, the Planning Commission estimated that productivity had generally declined by 20 to 30 per cent during the period following the Second World War. This has happened at a time when productivity has increased in such countries like the U.K., the U.S.A., and Japan, India's chief competitors. This, if true, must be one of the most disquieting features in our industrial development.

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measure of education, medical requirements and amenities. It is the absolute minimum below which wages should not be allowed to fall. A "living wage" represents, on the other hand, a standard of living which provides not merely for a bare physical sustenance but for the maintenance of health and decency, a measure of frugal comfort and some insurance against the more important misfortunes of life. While the attainment of a living wage is the direct objective of every civilised state, it may not be possible to act on this principle in India where the national income is very low. Hence we have to fall back upon a compromise, i.e., the principle of fair wages. A Fair Wage is generally higher than a minimum wage, but lower than a living wage. Its level is to be determined by taking into account the capacity of the industry to pay, the level of national income, the prevailing rates of wages and the productivity of labour etc.

The Bill provided for the setting up of a Board for determining fair wages. The Board should determine fair wages on an industry-cum-region basis and should take due note of all relevant factors. The level of fair wages should be so fixed as to enable industry to maintain production with efficiency. It should not be out of line with wages in other industries as to cause movement of labour and consequent industrial unrest.

Sickness Insurance: In the western and other industrialised countries governments have adopted the policy of insuring workers against the expenses made necessary by sickness. In return for a small weekly or monthly payment deducted from their wages, workers are given free medical treatment and cash payments during periods of sickness. Compulsory sickness insurance for industrial workers was first introduced in Germany in 1883 and in the UK in 1911. By 1936, 31 countries had adopted such schemes.

The necessity for adopting such a scheme in India is admitted by everybody. The worker in India receives very low wages and has, therefore, no or very small savings. As he cannot go to the factory during periods of sickness, he does not receive any wages at a time when, in addition to his usual expenses, he has to pay for his medical treatment. Hence a large percentage of workers cannot afford to have any medical treatment, and their health and efficiency suffer as a consequence. All of them have to incur debts during such periods to defray their usual expenses. A scheme of compulsory sickness insurance would

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Fixation of minimum wages: In almost every industrialised country the government had to take up the task of fixing minimum wages for special groups of labour, such as those who are in receipt of specially low wages or who are unorganised. The same conditions are also present in India. In this country, most of the workers received very low wages in a large number of industries. They are mostly unorganised. Trade unions have of course been established. But most of these unions are comparatively loose organisations, and habits of collective bargaining have not been developed. Hence the state in India was forced to intervene in a large number of cases and fix minimum wages for different groups of labour.

Proposals for setting up a machinery for fixing minimum wages were before the Government of India from a long time. The government was asked in 1926 to ratify the ILO convention on the fixation of minimum wages. But it did not consider it practicable to ratify the convention. The Royal Commission on Labour did not also consider it to be a practicable proposition mainly on the ground that we did not possess any statistics showing the extent to which labourers received "sweated" wages. The Commission, however, was inclined to favour the proposal for setting up a wage board for fixing minimum wages in the tea plantations of Assam. A number of Labour Enquiry Committees gave a favourable consideration to the proposal for fixing minimum wages. Nothing was, however, done by the government before the end of the Second World War.

At the present moment minimum wages have been fixed in almost all the large-scale industries and in a number of medium-sized and small-scale industries. This has been done under two different Acts, *viz.*, the Industrial Disputes Act (1947) and the Minimum Wages Act (1948). The former set up a machinery in the form of Industrial Tribunals for the settlement of industrial disputes. As the vast majority of these disputes were concerned with the question of wage rates, these Tribunals had to take upon themselves the task of fixing minimum wages. These Tribunals fixed minimum wages in almost all the major industries.

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Prof Adarkar's scheme was examined by two experts from the ILO, who suggested that the scheme of sickness insurance should be integrated with workmen's compensation and maternity benefits. A Bill embodying the conclusions of the government was introduced in the Parliament and finally passed in 1948 under the name of Employees' State Insurance Act.

Employees' State Insurance Act This Act provides for sickness, maternity, disablement and dependents' benefit for all industrial workers. All workers employed in factories employing 20 or more persons and using power will be brought within the operations of the Act, and the governments have the power to extend the scheme to other establishments. Employees whose remuneration exceeds Rs 400 a month are to be excluded from the operation of the Act. Seasonal factories are also to be excluded.

All workers who are to be insured under the Act will pay contributions at rates depending on their remuneration. The following table shows the rates to be paid by workers and employers per month.

Class of Employees	Employee's share			Employer's share			Total			
	Rs	As	P	Rs	As	P	Rs	As	P	
(a) Those whose daily wages are below Re 1/-			Nil		0	7	0	0	7	0
(b) Those receiving between Re 1 and Rs 1/8 per day		0	2		0	7		0	9	0
(c) Those receiving between Rs 1/8 and Rs 2		0	4		0	8		0	12	0
(d) Those receiving between Rs 2 and Rs 3		0	6		0	12		1	2	0
(e) Those receiving between Rs 3 and Rs 4		0	8		1	0		1	8	0
(f) Those receiving between Rs 4 and Rs 6		0	11		1	6		2	1	0
(g) Those receiving between Rs 6 and Rs 8		0	15		1	14		2	13	0
(h) Those receiving between Rs 8 and above		1	4		2	8		3	12	0

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The scope of the Act is of course restricted. It does not apply to any large-scale industry with the exception of plantations, and it excludes industries employing less than 1000 workers. So it is applicable only to minor medium-sized and small industries. Moreover, fixation of minimum wages by a government department is not a desirable proposition. The appointment of a wage board in the form of an Advisory Committee ought to have been made obligatory in all cases.

Principles for fixing minimum wages : What principles have generally been followed in fixing minimum wages ? Those who demand the fixation of minimum wages want such wages to be determined on the basis of ensuring a "living wage" for the workers. This is known as the principle of living wage. The principle of living wage, according to which wages should be equal to "a sum sufficient for the normal and reasonable needs of the average worker with an average family in the locality" represents a widespread popular aspiration.

While the principle looks reasonable at first sight, difficulties arise with regard to its practical application. What, exactly, constitutes "the normal and reasonable needs" of a worker ? Different people will have different ideas on this point. Who is an average worker ? What is the size of an average working class family ? What of those workers who have a large family or have to support old parents or other relations ? In practice, therefore, most of the authorities have refused to declare a living wage differing in any marked degree from the current ruling rates.

Another principle that is often stressed, especially by employers, is the capacity of the industry to pay. Here also difficulties arise with regard to the determination of the capacity of the industry to pay. Are we to measure the capacity of an industry to pay in the short period ? Or in the long period after allowing for expansion and modernisation ? The rates of profit earned by the industry are not a good guide as balance-sheets can be, and have been, manipulated.

In view of these difficulties reliance has been placed in fixing minimum wages on existing rates paid by the best employers in the industry or in comparable occupations. The Trade Boards in the U.K. often paid great attention to this factor.

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The scheme has unfortunately encountered considerable opposition from its inception. In the first place, the Corporation and the State Governments have not been able to come to an agreement with the doctors who are to provide medical treatment as to the rates of remuneration to be paid to the latter. It is reported that the Corporation has offered to pay a capitation fee of Rs. 6-8 per insured worker to the doctors. But the latter consider it as insufficient to cover their expenses. Secondly, opposition has also come from the side of the workers. In the areas where the scheme has been put into operation, some of the employers were providing excellent medical facilities to the workers and their families who were not required to pay any contribution in return. The scheme in the initial stages does not propose to provide medical treatment for the families of the workers. As a result, these groups of workers have opposed the introduction of the scheme which forces them to pay for benefits they were enjoying free. Moreover, no special arrangements have been made at Kanpur and Delhi for the hospitalisation of the workers who have, however, to contribute. Unless more hospital facilities are provided at the same time on or near the factory premises, the scheme will not naturally be popular among the worker.

Employees' Provident Fund Act: The necessity for introducing the system of old age pensions was pointed out by two members of the Royal Commission on Labour. (Mr. N. M. Joshi and Diwan Chamniall). Industrial life tends to break down the joint family system on which old people rely for their maintenance. The vast majority of workers receive so low

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Much will, of course, depend on the level at which minimum wages are fixed. If the second principle (capacity of industry to pay) is given due weight, no adverse effect would follow the fixation of minimum wages. If the first principle is followed rightly, the effects would depend on the gap between existing wage rates and the living wages. In practice, while lip service has been paid to the principle of living wages, its application in India has been tempered by many considerations.

Moreover, regard must be paid to the effects of higher wages on the efficiency of the workers. Higher wages would lead to better standard of living and so stimulate workers to increase output. It would also force employers to exert themselves to a greater extent and to make various improvements in their factories. Against this contention it has been urged that in India the general tendency has been that a rise in wages is usually followed by increased absenteeism among workers. In so far as this happens, productivity of workers would not increase. But while this may be the fact in individual cases, such effects were more likely to be temporary. In the other hand, the scope for improvements in efficiency is likely to be greater in view of the low standard of living of the workers.

Fair Wages : While minimum wages have been fixed in different industries, this was not considered enough, and the Industrial Truce Resolution of 1947 advocated the payment of fair wages to labour as essential for the maintenance of industrial peace. In pursuance of this resolution, a Fair Wages Committee was appointed in 1948 and issued its report next year. A Fair Wages Bill was introduced in the Parliament in 1953. But it was subsequently allowed to lapse.

The Fair Wages Committee, and following its recommendation, the Bill made a distinction between a minimum wage, a fair wage and a living wage. The minimum wage must provide not merely for the bare sustenance of life but for the preservation of the efficiency of the worker by providing for some

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Much will, of course, depend on the level at which minimum wages are fixed. If the second principle (capacity of industry to pay) is given due weight, no adverse effect would follow the fixation of minimum wages. If the first principle is followed rightly, the effects would depend on the gap between existing wage rates and the living wages. In practice, while lip service has been paid to the principle of living wages, its application in India has been tempered by many considerations.

Moreover, regard must be paid to the effects of higher wages on the efficiency of the workers. Higher wages would lead to better standard of living and so stimulate workers to increase output. It would also force employers to exert themselves to a greater extent and to make various improvements in their factories. Against this contention it has been urged that in India the general tendency has been that a rise in wages is usually followed by increased absenteeism among workers. In so far as this happens, productivity of workers would not increase. But while this may be the fact in individual cases, such effects were more likely to be temporary. In the other hand, the scope for improvements in efficiency is likely to be greater in view of the low standard of living of the workers.

Fair Wages : While minimum wages have been fixed in different industries, this was not considered enough, and the Industrial Truce Resolution of 1947 advocated the payment of fair wages to labour as essential for the maintenance of industrial peace. In pursuance of this resolution, a Fair Wages Committee was appointed in 1948 and issued its report next year. A Fair Wages Bill was introduced in the Parliament in 1953. But it was subsequently allowed to lapse.

The Fair Wages Committee, and following its recommendation, the Bill made a distinction between a minimum wage, a fair wage and a living wage. The minimum wage must provide not merely for the bare sustenance of life but for the preservation of the efficiency of the worker by providing for some

contributions to the Fund. If old employees of 10 years' standing in a concern operating such a scheme consider that the existing pension or gratuity benefits are better, they would have the option of remaining in the old scheme.

The provisions of this Act have been criticised on the ground that they are likely to put a great strain on the finances of industrial concerns. Employer's contributions are clearly an addition to wages and so would raise costs. In view of the existing state of the market they cannot be easily passed on to the consumers in the shape of higher prices. But it must be admitted that as the scheme provides for old age, it is a sound measure of social security. Moreover, it forces workers with low incomes to save at least something out of their earnings. These people would not have saved anything in the absence of such compulsory provisions. These savings would be available for investment purposes. So this scheme has the undoubted merit of accelerating capital formation.

EXERCISES

1. Discuss the reasons for fixing minimum wages in India, and examine the effects of fixation of minimum wages.
2. Examine the main provisions of the Minimum Wages Act of 1948. What principles have been followed in fixing minimum wages in India?
3. Describe the problem of a fair wage rate in any organised industry.
4. Examine the necessity for introducing a scheme of sickness insurance in India. Discuss the main provisions of the Employees State Insurance Act.
5. Discuss the provisions of the Employees Provident Fund Act and examine its effects on Indian industry.

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provide free medical treatment and cash payments to workers during their sickness and so improve their health and efficiency. Recognising this, a number of good employers like the Tata Iron & Steel Co., the Angus Jute Mills etc., have started hospitals and are providing free medical treatment for their workers. Some of them also grant sick leave with full pay for a number of days. But this benefit is enjoyed by only a small percentage of workers.

The proposal for introducing a compulsory sickness insurance for the industrial workers came before the Government of India in 1928. The Government decided not to adopt the scheme in view of the fact that it did not possess statistics of the incidence of sickness among industrial workers. The Royal Commission on Labour recognised this difficulty ; but it recommended that in order to get some idea of the probable cost of such a scheme, the government might introduce a tentative scheme applicable to a single establishment. Nothing was, however, done on this point. During the Second World War, the government at last felt compelled to consider the proposal and appointed Prof. B. P. Adarkar to submit report on the scheme of sickness insurance. He submitted his report in 1944 in which he submitted a scheme.

The *Adarkar Scheme* sought to cover three major groups of industries, viz., textiles, engineering and minerals. All workers who receive less than Rs. 200 per month or who are below 60 years in age will be insured, and they will have to pay premia, the amount varying with their wages. Workers whose wages are more than a rupee per day will pay 12 as. per month ; those whose wages are between 8 as. to Re. 1 per day will pay 8 as. per month and those whose wages are less than 8 as. per day will pay 4 as. per month. Employers will pay at the rate of Rs. 1-4 as per worker per month. In return for these payments workers will receive (a) free medical treatment during periods of sickness, and (b) cash payments at the rate of half of their own contributions from the fourth and subsequent days of sickness, up to a maximum of 90 days for permanent workers and 45 days for temporary workers. If the different governments agreed to contribute at the rate of 8 as. per worker, employer's share of contributions were to be reduced by 6 as., and worker's share by 2 as.

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split and the prosecution of left-wing leaders in the famous Meerut Trial weakened the movement. Efforts to arrive at a compromise were made and finally a provisional agreement uniting the two groups were reached in 1940. The outbreak of the second world war led to further dissensions and while the main body, the Trade Union Congress, favoured a policy of neutrality, another group under Mr M. N. Roy seceded and formed the Trade Union Federation with the policy of an all-out support to the war effort.

With the end of the war, labour leaders with strong Congress leanings formed another federal organisation in the name of the All-India National Trade Union Congress (INTUC) mainly with a view to counteract communist influences among the workers. Later on, Socialists who formally seceded from the Indian National Congress, started their own federal organisation, called the Hind Mazdoor Sabha. A section of moderate labour leaders have also started another federal organisation in the name of the United Trade Union Congress.

Present position of the movement The trade union movement has made remarkable progress in the last 25 years. The number of registered unions increased from 29 in 1927-28 with a membership of a little more than a lakh workers to 3522 in 1949-50 with a membership of more than 18 lakh workers. There has been a rapid increase in the number of unions in the recent years after 1945, when the movement spread to many new industries and embraced "white-collar" workers (i.e. clerks and others) among its membership. There has also taken place a gradual increase in the number of women worker members, the percentage of women members to total membership rising from 15 p.c. in 1927-32 to 66 p.c. in 1949-50. Among industries, the largest number of unions have been organised in the cotton textile industry followed by banking and insurance, electricity, gas, water and sanitary services, railways etc. The three industrially advanced states of West Bengal, Bombay and the U.P. contained about 64 p.c. of unions submitting returns and 68 p.c. of the reported membership. In general, the average size of trade unions is comparatively small. Unions with membership below 300 constituted nearly 59 p.c. of the total, and there is also a fairly large number of unions with membership below 50. Another disquieting feature is that a very small proportion

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The scheme is to be administered by a Corporation called the Employees' State Insurance Corporation consisting of 31 members with the Central Minister for Labour as the Chairman. The different State Governments will nominate representatives and the Central Government will also nominate 5 representatives each of the employers and employees, in consultation with their organisations. The Parliament will also nominate two representatives. The Corporation will have a small Standing Committee of 13 members, and there will be a Director-General appointed by the Central Government to act as the chief executive officer of the Corporation. The Corporation is to receive a grant from the Central Government for the first 5 years.

Provisions for medical treatment are to be made by the State Governments with the agreement of the Corporation, which shall share the cost with the governments.

As the government found it difficult to put the scheme into operation simultaneously in all parts of the country, it was decided to carry it out in different areas according to a fixed time table. Thus it was first started in Delhi and Kanpur in February 1952, to be extended to the Punjab in August 1952.

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There is now a clear need for a revised, comprehensive trade union law. The Act of 1926 is defective on many grounds. It creates an anomalous position as it allows an employers' organisation to be regarded as a trade union. The Royal Commission on Labour made a number of recommendations for amending the Trade Union Act. It wanted that the expenses of conducting audit should be borne by the government, and that the proportion of workers in the executive of the union should be raised to two-thirds instead of one-half as at present, and that the unions should be allowed to start and operate funds for political purposes without any restrictions. Lastly, it advocated that the unions should be allowed to start co-operative organisations of their own.

We must also squarely face the need for the compulsory recognition of unions by law. Collective bargaining habits have not developed to the desirable extent on account mainly of the opposition of the employers. Though the Royal Commission on Labour exhorted the employers to adopt a more sympathetic attitude and negotiate with the unions on equal terms, very few employers have actually followed this advice. Time has, therefore, come for the state to step in and provide for the compulsory recognition of trade unions.

Trade Unions Bill of 1950 In 1950, the government introduced a Bill in the Parliament dealing with the rights and duties of trade unions. The Bill has been allowed to lapse. In view of the importance of its provisions we propose to study its main points.

The Bill provides for the organisation and registration of a union. A trade union may be formed by any 7 or more persons and may apply for registration. Registration will be granted if it satisfies the following conditions, in addition to those laid down in the Act of 1926, *viz*, its rules shall provide for the payment of subscriptions by ordinary members at not less than 2 as per month, except that in the case of workers employed in agriculture, cottage industries etc., the rate may be lower; (b) the number of outsiders in the executive union shall

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Some provisions for old age existed in a few industries in our country. The railways, some government departments, a few cotton mills in Bombay and other places adopted a scheme of contributory provident fund. Workers regularly contributed, either on a compulsory or voluntary basis, a certain percentage (generally $6\frac{1}{4}$ p.c.) of their wages or salaries, and the employers contributed an equal amount. A few factories paid gratuities, while the payment of pensions was rather rare.

These schemes covered only a small percentage of the workers. Even in those industries where they were adopted, the scheme generally excluded the low-paid staff, where the need was the most urgent. These schemes were unsatisfactory for another reason. There was an absence of any set of rules, and everything depended on the decision of the management, which might not always go in favour of the workers.

A scheme for the introduction of provident funds on a compulsory basis was first introduced by the Government of India in the coal mines. It was later extended to other industries by the Employees' Provident Fund Ordinance promulgated in November, 1951. The Ordinance was in due course replaced by an Act.

Under the Employees' Provident Fund Act, the provisions were to apply to six groups of industries, *e.g.*, cement, cigarette, engineering, iron and steel, paper, and textile industries (cotton, Jute and silk). All establishments in these industries which are more than 3 years' old and which employ more than 50 workers were to be brought under the scheme. New concerns were to be exempted from these provisions for a period of 3 years. Provident fund deductions are to be made from the wages of all workers at the rate of $6\frac{1}{4}$ p.c. In calculating contributions both the basic wages and dearness allowances are to be taken into account. The employers are to contribute an equal amount and to bear the cost of administration of the Fund. The government may allow any group of workers to pay contributions at higher rates. The money thus realised was to be invested in Government securities. Facilities are to be provided for members for the payment of insurance premia out of their own

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Strength and weakness of the movement. In the last decade remarkable changes have taken place in the trade union movement. In the early stages the most of the unions were mere strike committees, which were organised on the eve of a strike, and faded away at the end of the strike. But at present the majority of the unions are more permanent organisations. They are better organised and are more active in many directions. They have wrested important benefits for the members and have fought a number of successful strikes. They have thus gained in self-confidence. Some of them like the Ahmedabad Textile Labour Union are rendering valuable services to their members through the establishment of schools, hospitals etc. The movement is now well-entrenched and has proved to be an important influence in the country.

But the movement exhibits several weak features. Though most of the unions are much better than strike committees, they are still now comparatively weak in organisation. Their membership figures are often inaccurate as subscriptions are irregularly paid. As unpaid subscriptions figure largely, their financial conditions are seldom very strong. As a result, very few of them can afford to pay strike benefits or unemployment and sickness benefits to their members. The welfare side of their activities has been very little developed except in the case of a few unions. In western countries labour welfare is regarded as one of the most important functions of a trade union. Trade unionism is not made at mass meetings or by fiery speeches alone. It grows out of the good earth of mutual service rendered.

Another serious weakness lies in the fact that as yet the majority of labour leaders have come from outside the labour ranks. These "outsiders" have of course rendered valuable services to the cause of the movement. But in order that the movement may be placed on a sound basis, its leadership must spring up from within the workers. The position has improved to some extent in recent years. Several leaders have sprung up from the working classes, and the educated people have been forced to join the factories for want of alternative

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TRADE UNIONS AND INDUSTRIAL RELATIONS

Trade Union Movement: Though industrialisation on modern lines is now more than a century old in India, the development of trade unions came much later. The credit for establishing the first organisation of workers in this country goes to Mr. Lokhande of Bombay who organised the Bombay Millhands Association in 1890 and presented a memorial to the Government on the eve of the passage of the Factory Act. This was, however, a loose and extremely short-lived organisation. In 1897, the Amalgamated Society of Railway Servants of India and Burma was formed mainly for benevolent purposes. Attempts were also made in a few cases to establish unions in the years before the first world war. But these were ineffective.

The real growth of the movement came after the first world war. That war caused prices and costs of living to rise to high levels, while wages everywhere lagged behind. This led to the emergence of much discontent among workers, who were emboldened by the rise of Communism in Soviet Russia. The political movement was gathering momentum, and the leaders wanted to broaden the base of the movement by forming organisations among the industrial workers. The result of all these factors was the rise of the trade union movement.

The first trade union was organised in Madras by Mr. Wadia in 1918. One by one other industrial areas followed suit and a large number of unions came into existence within the next few years. But these unions were mostly strike committees without any solid foundation. These unions were isolated organisations and soon attempts were made to set up an institution to co-ordinate their activities. This need was followed by the organisation of the All-India Trade Union Congress in 1920. It was a national federation of unions.

This federal organisation has a chequered history behind it. In 1928-29 this organisation was captured by Communists and other left-wing leaders, and the moderate element formed the All-India Trade Union Federation under N. M. Joshi. This

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